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END OF PROGRAM EVALUATION REPORT

(Nov 1999 – Oct 2002)

Cooperative Agreement between USAID and WWF Indonesia

No. 497-A-00-00-00002-00

The Outer Islands Bioregional Program :
**Integrated Protected Area
Management and Spatial Planning
In Kalimantan and Papua**

Independent evaluation conducted by

S. Juliani

Dr. Helen Schneider

WWF Indonesia-NRM/USAID

November 2002



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**THE OUTER ISLAND BIOREGIONAL PROGRAM: INTEGRATED
PROTECTED AREA MANAGEMENT AND SPATIAL PLANNING IN
KALIMANTAN AND PAPUA**

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EXECUTIVE SUMMARY

This report comprises the results of the external, independent evaluation of the 'Outer Island Bioregional Program: Integrated Protected Area Management and Spatial Planning in Kalimantan and Papua', a three year USAID-NRM funded program implemented by WWF Indonesia, which commenced in October 1999 and is due to finish at the end of October 2002.

The evaluation aimed to determine the degree to which the program has achieved its objectives in biodiversity conservation, protected area management and capacity building of stakeholders, to analyse enabling and hindering factors, and to provide recommendations on future courses of action.

In general, it is concluded that, on average between the two sites chosen for the program activities, around 80% of the planned outputs have been achieved consistently across the workplans for the three years. Significant progress has been made in terms of identifying high priority biodiversity resources, increasing awareness of some of the key endangered species present, and facilitating the inclusion of the protection of these resources within draft district spatial plans. Lessons have been learnt as to the effects of decentralisation on the process of designating protected areas, and on the need for appropriate and intensive approaches to all stakeholders, including local government and communities. Good relationships have been established with decision-makers at the district level and their capacity in land use planning policy-making has been increased through provision of data, maps and advice, as well as technical training. Appropriate alternative income generation activities, which would relieve pressure on biodiversity resources from local communities, have been identified and preliminary training has taken place.

However, the ultimate objective of an increase in the area of protected resources and the associated best practices in protected area management, has yet to be fully achieved due to a number of hindering factors, including some which were unforeseeable. The draft spatial plans in both districts have been compiled with input from WWF but neither has yet been presented to the parliament for discussion and ratification due to circumstances beyond the control of the program.

Given the substantial achievements so far, and the unique advantage WWF has in terms of the relationships built with local stakeholders and their image as a credible, useful, neutral agency by both local government and community members, it is recommended that the program be granted a no-cost extension in order to achieve the above outstanding objective. It is also recommended that WWF continue to build on existing achievements and relationships in both of the project sites in the medium term to further facilitate the institutionalisation of biodiversity conservation and sustainable development criteria within the spatial planning process, and to support stakeholders in the development of locally appropriate protected area management models.

I. INTRODUCTION

1. BACKGROUND TO NRM-WWF PROGRAM

In October 28, 1999, USAID and WWF/I signed a Cooperative Agreement for the implementation of The Outer Islands Bioregional Program: Integrated Protected Area Management and Spatial Planning in Kalimantan and Papua. It is called WWF Indonesia – NRM/USAID Program. The length of program is three years, which started from 21 October 1999 and will be completed by October 27, 2002. The total amount of financial resources funded by USAID was estimated at Rp14,739,416,092.

The program is implemented by WWF/I full time staff consisting of a Program Coordinator, Program Managers, Bioregional Planners and Administrative Support Staff in both provinces. Additional works were and still are done by consultants on a part-time basis. In addition the program should collaborate with NRM-2 partners, the Nature Conservancy (TNC), Conservation International (CI), local NGOs, Kemala, local governments and the private sector.

For the implementation of this project, two priority areas were selected: Sebuku-Sembakung watersheds in Nunukan district, East Kalimantan province, and Jamursba Medi – North Tamrau situated in the Vogelkop (Bird's Head) area, Sorong and Manokwari districts, Papua province.

Section 1.7 (c) of the Agreement requested the recipient (WWF/I) to arrange for an independent, external evaluation two months prior to the completion of the project. This is the legal basis for this evaluation.

2. MAIN OBJECTIVES OF EVALUATION

- a) To produce an independent evaluation of project implementation to date, referenced to project objectives and workplans by particularly focusing on conservation achievements, capacity building (local government, community and local NGOs), partnerships (stakeholders framework), and local government and community acceptance of the NRM program.
- b) To review work-plans proposed for the remainder of the project period with regard to likelihood of the project to achieve its objectives.
- c) To provide recommendations for improving current activities or for alternative courses of action.

The Scope of Work of this independent external evaluation can be found in *Annex I*.¹

¹ Annex I: Scope of Work of independent, external evaluation team

3. EVALUATION METHODOLOGY

The findings of this evaluation are based on a literature review of workplans and reports, observations in the field, together with comments and input from a variety of stakeholders that were interviewed during the course of the evaluation (see *Annex II*²). Unfortunately, due to scheduling difficulties, it was not possible to use Focus Group Discussion methods as had been originally planned. The itinerary of the evaluation team can be found in *Annex III*³.

II. PROJECT OBJECTIVES

The overall goal of the project is to strengthen institutional capacity, participatory planning and effectiveness in achieving biodiversity conservation at a bioregional scale. The goal is to be achieved through the following four objectives:

- Objective 1: Identify high priority biodiversity resources, describe how specific human activities adversely affect these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented.
- Objective 2: Establish biodiversity conservation as an important planning and decision making criteria, recommending changes to the institutional and legal framework, and educating government and private sectors.
- Objective 3: Strengthen protected area management through participatory planning and facilitation of stakeholder agreements, and test innovative institutional and funding arrangement for protected area management.
- Objective 4: Develop the capacity of stakeholders in protected area management and bioregional planning through training, workshops and cross-visits.

III. FINDINGS

There are two main aspects of the project to be evaluated as stated in the Scope of Work:

- (1) Project identification and design
- (2) Project implementation.

These two aspects are critical to the overall impact of the project on the beneficiaries, locally, regionally, and nationally.

² See Annex II: List of stakeholders interviewed

³ Annex III: Itinerary of Evaluation Team 18th September – 16th October 2002.

1. PROJECT IDENTIFICATION AND DESIGN

In essence, although the project's main assumption is to work at the local level, empowering local communities and local government, all parties concerned in this project grossly underestimated the impact of decentralization. In fact, this is one of the main lessons learnt that has been identified in the course of this evaluation exercise:

(a) Project design

The project design was sufficiently clear in terms of objectives and activities to be carried out by WWF. However, the project objectives can be seen to have been over-ambitious given the time period of the project and WWF's previous experiences in the time taken to establish protected areas and carry out participatory approaches to management plan design and implementation.

The Cooperative Agreement worked well for both USAID-NRM and WWF Indonesia, in that both parties should agree any new and/or modified activities through documented communication between the two parties. This includes approval of workplans on an annual basis, and within the time period of each workplan, approval of any modifications that were deemed necessary to contribute to the success of the project.

Project management also plays an important part in ensuring that project activities are carried out and supported by the organization: for instance, financial and administrative mechanism procedures that support field activities; resource management for each project site; Monitoring and Evaluation (M&E); and coordination within NRM-WWF projects, as well as among the various projects within WWF. In this project, M&E was carried out internally by WWF, focusing on ensuring that any administrative requirements such as narrative and financial reports were submitted in a timely manner so that subsequent financial disbursement from USAID-NRM would not be delayed. The mechanism for substance monitoring, on the other hand, was weak, as emphasis was put on ensuring that reports are done on time.

A substantial part of the project design required dealing with communities, through a participatory approach to protected area management, as well as with public administration in relation to incorporating biodiversity values into spatial planning. Aspects related to coordination with local government and the complexities of local culture (particularly in Papua) were underestimated. This caused delays and changes in the workplan and activities, as well as the location of field staff, as issues arose which needed to be addressed through new/different strategies. In this regard, the project design was sufficiently flexible to accommodate the changes that were needed to address issues arising from the implementation of local autonomy in each project site.

(b) Project sites

The areas chosen for this project were identified as having important biodiversity values (e.g. endemism, endangered species, etc.) and as being subject to immediate or potential threats to the maintenance of that biodiversity. Within the regions of Kalimantan and

Papua, the project has identified several sites that fit these criteria. However, the logistics of needing to work closely with district level government, as a result of decentralisation, and the sheer size and accessibility problems in these two regions meant that, after initial identification of key biodiversity resources, the project had to focus on one key site in each area i.e. Sebuk-Sembakung in Nunukan District, East Kalimantan and Jamursba Medi-Tamrau Utara in Sorong & Manokwari Districts, West Papua⁴.

(c) Changes in the political and socio-economic situation

This is the first WWF project to deal directly with district level (Kabupaten/Kota) in the decentralized government. WWF has an MoU with the Ministry of Forestry and this is the main government agency they have traditionally worked with at national and local levels (BKSDA⁵). WWF has substantial experience working with the Ministry to designate protected areas and develop management plans for these areas, in recent years with more emphasis on participation of local stakeholders and incorporating community development activities to encourage sustainable management through the ICDP⁶ model. Although this process could take as long as 8-10 years, previously the strategy was that once management plans were in place, WWF could leave implementation to the Ministry (through UPT⁷ or *Balai Taman Nasional*) as protected area status more or less guaranteed protection.

However, in recent years encroachment into established protected areas has increased dramatically and it is clear that centrally designated protected area status is no longer sufficient to guarantee conservation of these areas. The change of WWF's approach has arisen due to realisation that other land uses and resource exploitation are now also affecting biodiversity conservation within protected areas. In addition to working through spatial planning at the district level, WWF has also recently commenced national programs on illegal logging, palm oil and forest fires in recognition of the fact that these threats cannot only be handled at the local level but rather require co-ordinated efforts to influence forest law and governance.

It has become clear that, due to decentralisation, direct and continuous interaction with district government agencies is now needed. The power and authority of the Ministry has been significantly undermined by decentralisation regulations (e.g. UU22/1999) and attempts to reclaim some of this authority, for example through PP34/2002 on Forest Land Use and Compilation of Forest Management Plans, have been largely ignored by district governments. This situation, combined with the effects of the prolonged economic crisis and the lack of law enforcement, has led to an unprecedented increase in logging, particularly in Kalimantan and Sumatera. This process has been facilitated by the issuance of small scale logging and land clearance/re-planting permits by district governments without the necessary institutional capacity to monitor these activities or develop the comprehensive land use plans needed to rationalise their distribution. In addition, some district governments have taken to 'legalising' illegally logged timber by imposing local

⁴ See Location Maps in Annexes X & XI

⁵ BKSDA = Local Natural Resource Conservation Office of the Department of Forestry

⁶ ICDP = Integrated Conservation and Development Program

⁷ UPT = *Unit Pelaksanaan Teknis* or Technical Implementation Unit

fees and taxes or auctioning off the captured timber and then issuing the necessary permits to allow the timber to be 'exported' out of the district⁸.

The effects of decentralisation on project implementation are discussed further in the following section.

2. PROJECT IMPLEMENTATION

Assessment of the NRM-WWF project implementation in both sites (Nunukan and Sorong) revealed three main groups of aspects that have affected progress over the past three years, i.e.

- a) **Internal:** Workplans and reports, staffing and organizational structure, management of financial resources, approach and mechanism for stakeholders participation, and impact on and sustainable activities by the local beneficiaries
- b) **External:** Effects of decentralization, culture, site conditions
- c) **Coordination:** with and amongst donors, peer organizations, and other local, regional, and national stakeholders

The following section reports on the findings of factors, both positive and negative, affecting the achievement of project objectives according to each of these aspects. Factors have been differentiated by whether they are internal or external: internal enabling factors are the strengths of the project design, implementation and management while internal hindering factors are the weaknesses. Similarly, external enabling factors can be considered as opportunities and external hindering factors as threats to the achievement of the project objectives.

(a) Internal Aspects

(i) *Workplans and reports*

In both sites, the annual workplan submitted each year included some agreed modifications, mostly caused by delays due to a number of technical and social factors, such as logistics, consultants schedule, weather, and other unexpected circumstances including the influx of returning illegal migrant workers to Nunukan from across the Malaysian border and rejection of WWF activities by some communities in Sorong. The minor changes included activities being expanded/contracted as necessary, and these changes were easily traceable. Achievements were still within the same category of objective(s). Achievements – illustrated in terms of percentage of completion of each output as stated in the workplan – and comments for each project site can be found in *Annex IV: Achievements against workplans – Sorong and Nunukan*.

In the third year workplans, an increased focus on what targets were achievable within the remaining timeframe resulted in a change in workplan format to include targets and milestones, as well as the necessary activities, towards achieving those targets.

Individual reports and documentation for particular activities were referenced and/or attached to the semi-annual reports. A positive note should be mentioned here on how thorough most of the reports were, which not only contained list of activities but more

⁸ see for example, McCarthy (2001)

importantly the progress of each activity. However, random sampling of retrieval of reports showed that the cataloguing/indexing system was insufficient to enable quick and easy access to the reports database. Lack of knowledge management system (i.e. database, indexing, cataloguing, for easy and quick access to any report needed) if left as is now could lead to further under-utilization of data, and create an image of an unorganised system of data/library management in WWF Indonesia.

(ii) Staffing and organizational structure

During the three year period of this project implementation, some changes were made to the organisational structure. The decentralised decisions on project implementation, that had been a tradition for WWF Indonesia, were revisited. To better communicate lessons learned, a national co-ordinator position was established in Jakarta to best facilitate sites and donor's communication – as opposed to providing a technical and supervisory role to the programme managers in the field.

While the prolonged transitional period of management changes had taken its toll in field support in the first two years of its implementation, the management decision to ensure that essential project team members were stationed in the field was most appropriate.

Weaknesses/Hindering Factors:

General (both sites):

- Changes in staffing of the project⁹, resulting in gaps and the need to re-establish relationships with stakeholders and re-learn the history of the project
- Initial decision in the proposal, to base the location of the WWF- NRM Program Managers (and some staff) in Jayapura and Balikpapan meant insufficient socialisation of the program with stakeholders in the early stages. Intensive interaction with the local participants accelerated only in the third year once staff were permanently stationed on site.
- Under the new WWF structure, the mechanisms for institutional learning are not yet clear. Traditionally, communication between WWF projects has been limited because they have tended to be site-based/project orientated. The challenge remains to unite individual projects into a national strategy; there is a need to change staff's mindsets to have a more strategic overview rather than be solely focussed on individual projects
- A Monitoring and Evaluation system which focuses on fulfilling donor requirements through submission of workplans and reports but appears to have no clear mechanism for sharing learning between projects and project sites, both current and past

Specific to Papua:

- Restructuring of the Sahul Bioregion¹⁰, designed to rationalise resources and encourage a less site-based and more strategic programmatic approach, has meant that resources have to be shared between projects and this has occasionally led to delays, for example where heavy demands have been placed on GIS resources/expertise

⁹ Due mainly to some team members being unable to relocate to district capitals

¹⁰ See Annex V Organogram of staffing structure – WWF Sahul Bioregion

- In the first two years with the Program Manager initially based in Jayapura, when problems then arose with some communities, the Sorong based staff did not feel they had the authority to take decisions on how to proceed

Strengths/Enabling Factors:

General:

- WWF is seen by local governments, local NGOs and most communities in Nunukan and Sorong, as a credible, neutral/independent organisation
- Good spatial planning and GIS expertise/equipment within WWF-NRM Program in both Kalimantan and Papua
- Project staff experienced with working within government, strong lobbying skills and protected area management experience. For example, in Kalimantan the new Program Manager and the Bioregion Director together have decades of experience as Heads of National Parks. In Papua, the lobbying skills of staff are evidenced by their initial success in encouraging the District Head and the Governor to issue recommendation letters for JMTU to be designated as a protected area.

(iii) Management of financial resources

The budgetary information made available was insufficiently detailed to do in-depth analysis of budget against expenditure with regard to individual activities or objectives over the course of the project or between the two sites. The only findings under financial resource management & distribution that can be made are therefore as follows:

- In the first year of the project, the budget for Papua was only 85% of that for Kalimantan. Both projects overspent the budget in the first year by 106.61% and 104.22% respectively. In the second year the two budgets were approximately equal; in Papua 95% of this budget was expended, while in Kalimantan, according to figures supplied, only two-thirds of the planned budget was spent. In the final year, the Papua budget is over 120% of that of Kalimantan due to increased expenditure on multi-stakeholder meetings, as part of the public consultation process, and also an increase in the number of field activities to socialise the results of the process and elicit more information about the conditions and needs of communities.
- There has been some minor confusion over USAID financial accounting and procurement systems, resulting in having to reimburse some funds for activities which did not satisfy requirements

(iv) Approach and mechanism for stakeholders participation

The mechanism for local participation, was traditionally done through meetings, workshops, monitoring visits, and involvement in biodiversity and socio-economic surveys. In both sites, WWF staff were warmly welcomed in the various local government offices visited during the evaluation. This was an indication that the

approach taken with the local government decision-makers offices has been positively received.

Mechanisms for stakeholders participation and the public consultation process in both sites are described in more detail under Objective 3 in the Findings section of this report. In Papua, initial rejection of some of WWF's activities by some communities has required a more concentrated effort on identifying and implementing participation mechanisms, and community development activities, as well as socialisation of the project to beneficiaries.

(v) *Impact on, and sustainable activities by, local beneficiaries*

As WWF-NRM in both places were the first large NGO to work directly and intensively with the local government, traces of their activities are very easily seen. WWF – NRM produced maps and other data are clearly used in many government offices. Staff, as well of Heads of Divisions, in all local government offices visited during the course of the evaluation, recognized and greeted WWF staff as soon as they walked in. GIS maps produced by WWF are used not just by local governments, but village heads also came to the WWF office to request maps to use in their own discussions with district and sub-district administrations.

Many of the alternative income generation activities developed during the course of this project have only just started to be implemented by local communities so the long term success and impact of WWF's training in this field cannot yet be measured. However, the fact that villagers from outside the area of WWF's work have approached WWF to develop similar programs in their villages shows the enthusiasm of local communities to be involved in these activities.

(b) External Aspects

(i) *Effects of decentralization*

Threats/Hindering Factors (General)

- Need for continuous socialisation and lobbying of local government requires projects to be based in district capitals with resulting implications for resource allocation and logistics¹¹
- Biodiversity conservation issues have to compete for the attention of local government with private sector interests e.g. HPH¹², oil palm investors, mining companies etc. who promise to bring much needed local revenue
- Enthusiasm for regional autonomy and the changes resulting from *reformasi* has meant that local communities are now more vocal than previously in demanding compensation for loss of traditional resource rights (more so in Papua)
- Issuance of numerous small-scale forest exploitation licences by the Bupati to KOPERMAS¹³/ "Community Co-operatives" before a comprehensive spatial plan

¹¹ See also Hindering Factors under site conditions

¹² HPH = *Hak Pemanfaatan Hutan* or Forest Exploitation Licence/ concession granted by the Ministry of Forestry to logging companies

is in place and without the necessary institutional capacity within local government to monitor their activities (more so in Nunukan)

- Re-organisation of government departments (creation of new departments) and sub-division of Districts requiring re-organisation of local government structure and staffing and resulting in inexperienced staff in key positions, as well as delays in the ratification of the Spatial Plan
- Inexperience/low level of education of district parliamentarians
- Unexpected factors such as the sudden influx of migrant workers into Nunukan which has taken precedence over all other issues being handled by the local government since August 2002, leading to
- WWF unable to influence the local parliament schedule in order to ensure that the Spatial Planning process is completed according to WWF-NRM workplan schedule

Opportunities/Enabling Factors: (General)

- Greater authority of district government (and provincial government under Special Autonomy Status for Papua) includes the ability to issue local government regulations (PERDA¹⁴) that should in theory better reflect local conditions and the needs and rights of local people
- Stronger role of DPRD¹⁵ potentially means greater accountability of local government to their constituents
- New district governments more open to input from other stakeholders such as WWF
- Sorong is an older more established local government with plenty of central government funding (under Special Autonomy provisions) and therefore potentially under less pressure to exploit resources for short-term gain. The Bupati has a vision of sustainable development for Sorong and a commitment to stop unsustainable exploitative activities, such as those of HPH, in the district. However, the implementation of this vision faces numerous problems with existing regulations, available funds, local government capacity/ human resources, and national and local politics

(ii) Cultural factors

The following apply to both sites but have been particularly influential on the project in Papua

Threats/Hindering Factors

- Complex and unclear structure and authority of traditional communities and the institutions that claim to represent them (LMA¹⁶) causing misunderstandings and

¹³ KOPERMAS = *Koperasi Masyarakat* or "Community Co-operative" which has been granted small-scale forest product exploitation licence by the Bupati.

¹⁴ PERDA = *Peraturan Daerah* or Local Government Regulation

¹⁵ DPRD = *Dewan Perwakilan Rakyat Daerah* or People's Local Consultative Assembly (local parliament)

protests from communities who feel they are not adequately represented/ involved in decision making over their traditional resource use rights.

Opportunities/Enabling Factors

- Some traditional cultural beliefs which support conservation of natural resources (e.g. taboos, sacred sites, traditional resource use patterns).

(iii) Site conditions

Threats/Hindering Factors

- Poor accessibility – size of area, transport, time, influence of weather – affects project activities, as well as restricts the level of government services and local government knowledge of the situation in isolated villages, and also the economic and community development of those communities
- Facilities – poor communication facilities in district capitals e.g. unreliable telephone/fax, unreliable or non-existent email access, frequent power cuts

(c) Coordination:

Co-ordination is a term often discussed but not so easily implemented. However, in this project, efforts to co-ordinate have shown positive results:

- *Peer organisations.* In Nunukan, WWF-NRM has successfully partnered with CARE to work in some of the villages within the proposed protected area, with CARE focusing on community development activities. In Papua, staff of local organizations have interned with WWF-NRM through joining their field activities. In both places, joint proposals have been written for future funding.
- *Local Government.* In both places, efforts have been put into more frequent communication and involvement of both executive and legislative bodies of the local government. In these three years, however, the focus was put on the former, causing the latter to complain and urging WWF – NRM to increase their efforts to co-ordinate with DPRD (local parliament). Legal Drafting training was one of the efforts targeted toward capacity building for DPRD members.
- *Donor agencies.* WWF has to date benefited from good working relationships with not only their network of WWF organisations internationally, but also with donors such as USAID, GTZ, EU, etc. Activities under the WWF-NL funded Action Network programs in Kalimantan and Papua have complemented USAID-NRM funded activities under this program. Currently, proposals are being submitted to DFID and NOAA/N.W. Fisheries Centre for further funding to complement and/or extend activities in the current WWF-NRM sites.

¹⁶ LMA= *Lembaga Masyarakat Adat* or "Traditional Community" Institution

3. ACHIEVEMENT OF PROJECT OBJECTIVES

The following section discusses the performance of the WWF-NRM Program against objectives. Outputs against objectives according to each years' workplan can be found in *Annex IV: Achievements against workplans – Sorong and Nunukan*. The descriptions below address issues outlined in the Scope of Work for the independent consultants assigned for this external evaluation¹⁷. The underlying issue in all explanations below is the impact of project activities on beneficiaries.

For Nunukan, approximately 80-90% of the outputs have been produced according to the workplans. For Sorong, on average 75-80% of planned outputs have been achieved in each of the three years of the project.

PAPUA

Objective 1 – Identify high priority biodiversity resources, describe how specific human activities adversely affect these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented.

Biodiversity Analysis

An inventory of high priority resources has been carried out for the province of Papua based on a review of existing literature¹⁸ and the results of two biodiversity planning workshops involving a number of Indonesian and international experts¹⁹. This analysis identified the Bird's Head region as containing the highest priority biodiversity resources in need of protection. Within this region, the coastal area of Jamursba Medi - the world's fourth largest nesting beach for Leatherback turtles (*Demochelys coreacea*) - and the inland Vogelkop montane and associated lowland forests of Tamrau Utara - one of the key priority biodiversity ecoregions identified above - became the focus of the NRM program in Papua.

Rapid Biodiversity Assessments (RBA) have been carried out in the eastern part of Tamrau Utara²⁰ and in Jamursba Medi²¹ and the resulting data have been compiled in the NRM database. Plans to conduct a comparative survey in a third location²² in the western part of the area which is part of a logging concession could not be realised due to rejection of WWF's activities by some members of the community. In addition, for the whole of the Bird's Head area, existing spatial and tabular data have been collected and processed, along with up-to-date information on vegetation and land use from the interpretation of LANDSAT TM 7 satellite images (November 2000), to form the basis of a GIS.

¹⁷ Annex I: Scope of Work of independent, external evaluation team

¹⁸ e.g. Ronald Petocz (1985); Biodiversity Conservation Priorities Map produced by Conservation International and others (1997); National Biodiversity Action Plan (1993); other reports & proposals from FAO

¹⁹ Biodiversity Planning Workshop March 2000 (co-sponsored by WWF-NRM/USAID, Bapedalda, CI and NRM/EPIQ) & Biodiversity Survey Planning Workshop Aug 2000 (co-funded by Sahul Action Network & WWF-NRM/USAID).

²⁰ RBA of Saukorem sub-district, Manokwari district June – August 2001

²¹ RBA carried out in June 1999 as part of the existing turtle monitoring Program.

²² Wewe Kwoor, Sausapor sub-district, Sorong district

Threat Analysis & Lower Impact Alternatives

Threat analyses categorising types of threats, actual and potential threats and level of severity have been carried out for the selected priority area²³, as well as to a more general extent at the district level²⁴. Data from macro-economic reviews of the districts of Sorong and Manokwari undertaken with other funding have been compiled²⁵.

Socio-economic surveys and participatory mapping/PRA methods in villages within the Jamursba Medi – Tamrau Utara (JMTU) area have improved understanding of the current resource use practices of the local communities and potential threats to biodiversity arising therefrom. The needs and aspirations of the communities have also been elicited, as a basis for identifying appropriate alternative economic activities which improve the welfare of the people without threatening biodiversity.

WWF and their counterparts in BKSDA have implemented a community-based NRM model based on employing and training community members to guard and monitor the turtle nesting beaches. Results of on-going research and monitoring by WWF have shown that this model has been successful in practically eliminating poaching of adult turtles and collection of eggs²⁶ as it builds upon the customary connection between the community and the turtles while at the same time offering an alternative source of income (since outsiders used to pay in kind for the right to take eggs from the beaches where the community holds traditional resource use rights).

In addition, WWF's partners, BKSDA and the local NGO Yayasan Alam Lestari, have been working with local communities to investigate ways to mitigate threats to turtle eggs and hatchlings from natural predators, for example through erecting an electric fence along the beach in the nesting season.

In the inland areas, in recognition of threats from exploitative activities such as logging by HPH and KOPERMAS, WWF has developed a strategy to facilitate alternative income generation activities for local communities so that they are not dependent on income received from logging. The majority of local communities have recognised the negative impact of logging on their natural resources and have issued statements rejecting HPH activities on their traditional lands. The Bupati has suspended the HPH licence of PT Multi Wahana Wijaya for contravening regulations (illegal logging), based on the communities' protests and analysis of HPH company's activities in Sorong with input from WWF²⁷.

Increase in area of protected resources

At a WWF workshop in December 1999 a proposal was put forward by BKSDA to join Tamrau Utara Nature Reserve with Jamursba Medi under a single National Park designation. This proposal was supported by participants, including some of the coastal communities who would be affected, based on awareness of the negative effects on the coastal ecosystem caused by degradation of forested areas in the Kwoor River catchment due to logging activities of HPH PT Multi Wahana Wijaya. Under the new proposal this

²³ WWF (2001d)

²⁴ WWF (2000)

²⁵ See Annex VI: Spatial data collected at provincial and regional scale in Papua

²⁶ see for example Hitipeuw, C & John Maturbongs (2002)

²⁷ WWF (2001a)

area of Limited Production Forest, together with an area of existing Protection Forest, would also be included in the National Park thus protecting the biodiversity of the whole landscape unit.

This proposal to designate the area as a National Park originally received strong support in the form of recommendation letters from the Bupati (no. 503/546 May 2000) and the Governor (no. 522.5/1676/SET June 2000). Ordinarily, the next step would have been to legalise this status through a Ministerial Decree from the Ministry of Forestry in Jakarta but adverse reactions from communities who had not been involved in the process delayed the establishment of a National Park and required a change of approach from WWF and other stakeholders supporting the proposal²⁸.

Objective 2 - Establish biodiversity conservation as an important planning and decision making criteria, recommending changes to the institutional and legal framework, and educating government and private sectors.

Institutional and legal framework

WWF have collected available data on planning policy and reviewed the existing framework and process of planning and decision making in Sorong district in 2000²⁹, as well as analysing the status of development and conservation in the district³⁰. Through close collaboration with district government offices, WWF have kept up-to-date with the developments and changes that have occurred as a result of decentralisation and Special Autonomy status for Papua, although there is still much confusion within local government itself over roles and responsibilities for natural resource management and spatial planning processes and the situation is still very dynamic.

In the initial stages of project, relationships were established with provincial level government agencies and local NGOs involved in planning and conservation. As the role and authority of district government increased as a result of the passing of decentralisation legislation, WWF began to concentrate on establishing positive relationships at the district level. Representatives of district and sub-district government, local NGOs and *Lembaga Adat Masyarakat* interviewed by evaluation team all confirmed good relationships with WWF and appreciation of the input WWF have provided in terms of data, maps and advice.

As a result of these endeavours, the new draft spatial plan for Sorong district incorporates WWF's recommendations for the Jamursba-Medi to be designated a Wildlife Sanctuary and Tamrau Utara's current Nature Reserve status remains the same. However, there is some confusion over the proposed status of the contentious area between the two which is currently designated as Limited Production Forest. In the draft plan this area is mapped as "*Hutan PPA*", which is not a standard designation for either production or protected forest and for which there is apparently no further explanation within the plan document. As yet the session to discuss, amend and ratify this plan by the DPRD has yet to be scheduled. However, the potential incorporation of these high priority biodiversity resources as a

²⁸ see findings under Objective 3

²⁹ WWF (2001b) & (2001c)

³⁰ WWF (2000)

protected area within the district spatial plan will open up the opportunity for locally legislated protected area status which is more acceptable to the local communities³¹

Educating government officials & private sector

Government officials interviewed during the course of this evaluation showed an awareness of the importance of conserving species, particularly flagship species,³² such as turtles, and bird species such as *cendrawasih* (Birds of Paradise), in Sorong.

However, it was also clear that WWF has had to be pragmatic in their approach to ensuring high priority biodiversity resources are protected through the spatial planning process, given that revenue raising and the prosperity of the people are the main concerns of the local government. WWF have therefore also been stressing the importance of the functions of intact ecosystems in maintaining ecological processes, such as the hydrological cycle, thereby maintaining water supply, and preventing floods, soil erosion etc which would have negative economic impacts. Similarly, particularly in Papua, the maintenance of those traditional cultural values, rights and practices of indigenous people, which are generally biodiversity friendly, has been promoted as a key issue in the planning and development process, in addition to biodiversity *per se*.

Criteria

It is clear that WWF needs to do more to promote the importance of biodiversity in a format which is both understandable to government (both legislative and executive) and which clearly shows the economic value of biodiversity conservation. Without this it is difficult to establish biodiversity as a key planning and decision-making criteria at the district level.

Objective 3 - Strengthen protected area management through participatory planning and facilitation of stakeholder agreements, and test innovative institutional and funding arrangements for protected area management

It was agreed that the activity of documentation of lessons learnt would concentrate on those arising from this project in the two sites in Kalimantan and Papua, rather than a more global documentation of WWF's experience throughout Indonesia as outlined in the original proposal. This document is scheduled to be submitted along with the project final report.

Participatory planning

Since the first year of the project WWF has carried out many activities to socialise the concept of sustainable natural resource management and biodiversity conservation with local communities, NGOs and government. However, there have been some problems with

³¹ See findings under Objective 3 and section on Decentralisation for more discussion on Local Regulations/changes to legislation

³² Charismatic species which appeal to people due to their size, appearance, 'cute' behaviour etc and which can be used as a foundation of conservation campaigns

the mechanism of participation. In the first instance, only the coastal communities were represented at the workshop where the proposal for the National Park was first put forward and supported.

Although this proposal received much support from the local government in the form of recommendations from the Bupati and Governor, some Karon communities in the Tamrau Utara area, and those in living within the area currently designated as Production Forest, objected to the proposal. In particular, the inclusion of the village of Kwoor meant that some local people would lose income from involvement in logging activities and these people protested the proposal.

WWF attempts to overcome this opposition through socialisation of the proposal through local NGOs and traditional community institutions (*Lembaga Masyarakat Adat* - LMAs) were less than successful. Through more recent direct consultations with the communities themselves it has become clear that many community members felt that these institutions did not adequately represent them and, in some cases, even exploit communities' customary resource use rights for the LMA's own gain (through compensation claims, the money from which is said not to reach the villagers themselves).

In order to ensure the participation of all stakeholders in the decision-making process on the future status of the area, WWF organised a public consultation meeting in February 2002³³. Prior to the meeting itself several other meetings were held to socialise the purpose of the public consultation meeting and to solicit input from all communities likely to be affected by the proposal, both those for and against. A publicity campaign was also organised through stakeholder dialogues on the radio and articles in the local newspapers in the run-up to consultation meeting. This process has been recognised by the local government as the first truly democratic consultation to be held in the district.

Stakeholders Agreements

The public consultation process resulted in several written statements from the communities involved that could be considered as the basis for stakeholders' agreements. The statements assert that the majority of communities³⁴ in the area support the WWF-NRM Program and efforts to conserve the nature and culture of the area over which they hold traditional rights. They also state that the project should also include human resource and economic/community development. The majority also agree to conserve the natural resources of JMTU and reject the activities of the HPH PT Multi Wahana Wijaya, demanding that their licence be permanently revoked. However, these communities reject the proposal to designate the area as a National Park due to negative perceptions of the term "National"³⁵. Instead they propose that the area be designated "The Karon Indigenous Communities Nature Conservation Area"³⁶ and that this protected area designation should be enshrined in a local government regulation (PERDA) with the proviso that the

³³ participants included community representatives, local government, Ministry of Forestry officials and members of the National Parliament

³⁴ See Annex VII: "Approximation of which areas accept and which reject the proposed protected area in Papua"

³⁵ considered to mean that the land would belong to the state and therefore traditional resource use rights would not be fully recognised

³⁶ *Kawasan Pelestarian Alam Masyarakat Adat Karon*

management of the area be the responsibility and right of those who hold traditional resource use rights there.

Institutional and legal framework

WWF has been lobbying district and provincial governments to issue recommendations that reflect the communities' aspirations. Similarly WWF in Jakarta has been lobbying the two Papuan members of the National Parliament who attended the Public Consultation to influence the national government (Ministry of Forestry) to do the same.

To try to overcome the problems caused by inadequate representation of communities by traditional community institutions, WWF-NRM has also been working on institutional strengthening of LMAs and local NGOs³⁷.

Funding arrangements

Given the need for developing of alternative economic activities in the villages as part of the stakeholder agreement for managing the area, WWF has increased its emphasis on needs assessment and identification of feasible income generation alternatives in co-operation with local government agencies³⁸. As a result of this co-operation, and socialisation of the results to the local parliament (DPRD), there have been a number of positive reactions from local government to provide economic incentives to local communities³⁹. In addition BKSDA have agreed to prioritise the available conservation budget for Jamursba Medi - Tamrau Utara.

WWF has also been lobbying district and provincial government for introduction of economic tools (incentives and disincentives) to promote conservation. Suggestions include the allocation of conservation funds from the national to the district government and the facilitating of access to the global market for stakeholders implementing best practices in forestry, agriculture or other natural resource management related economic development activities.

At a provincial scale, WWF has helped establish the Biodiversity Trust Fund for Papua, an innovative conservation funding mechanism. In order to build on progress so far, WWF is also currently discussing several proposals with other donors.⁴⁰

Objective 4 - Develop the capacity of stakeholders in protected area management and bioregional planning through training, workshops and cross-visits
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³⁷ see findings under Objective 4

³⁸ see findings under Objective 4

³⁹ BAPPEDA to seek funding for introduction of shipping transport and DPRD have agreed to allocate funds to subsidise the cost of airplane tickets to the inland area in order to help improve accessibility of communities' produce to markets.

⁴⁰ Joint proposal with local NGO YAPALVO to DfID Multistakeholder Forestry Program to develop local communities' and LMAs' participation in the planning process for natural resource management; Proposal to NOAA/NW Fisheries Centre to develop marine protected area management system with local communities in the Jamursba Medi area

Training & workshops

In order to increase the capacity of stakeholders in protected area management and spatial planning WWF has implemented a number of activities. Training in participatory mapping/PRA has been provided to researchers, NGOs and local government staff who have then been directly involved in such activities in villages in the proposed protected area.

GIS and landscape planning training for relevant local government offices has been carried out at provincial and district levels in Manokwari but has yet to be carried out in Sorong due to lack of equipment. However, BAPPEDA in Sorong have expressed a willingness to fund training in GIS should this become feasible and representatives from Sorong district government have attended the provincial level training.

Those government officials and NGO staff interviewed in the course of this evaluation that had been involved in the above activities all considered that their capacities in these areas had increased. However, WWF appears to have had no structured mechanism to measure this increase in capacity.

Information collected through socio-economic surveys has formed the basis for development of alternative economic options for local communities. Training has included kiosk management and various food and non-timber forest product processing methods. These trainings have been enthusiastically received and there have been requests from the communities for other similar training activities, for example in tailoring and cultivation and processing of traditional medicinal plants. WWF has even been approached by communities living outside the proposed protected area who would also like to benefit from these projects.

Socialisation activities & cross-visits

In addition, there have been several awareness raising activities and socialisation of sustainable natural resource management concepts, vision and mission of WWF and the meaning of protected area status to villages. This has been particularly important given the initial misunderstandings over the meaning of National Park designation, for example. The success of these activities can be seen in the increase in the number of communities accepting the WWF Program⁴¹. A cross visit to Kakadu National Park in Australia increased awareness of participants⁴² of the role of indigenous communities in the management of protected areas and the potential of eco-tourism.

Other capacity building activities

Finally, in order that they be better able to adequately represent their constituents, the institutional capacity of both local NGOs and LMAs has been strengthened through the establishment of a local network and the facilitation of work plan development. WWF has also been involved in discussions on the establishment of *Dewan Adat* as provided for in

⁴¹ as noted under Objective 3 above

⁴² head of LMA Abun/Karon, Director of Yayasan Fisita, Member of DPRD Sorong, community member from Sausapor village. See comments from participants in SAR May-Oct 2001 Appendix I

Special Autonomy Law UU21/2001 as an opportunity to develop a new management model that involves and respects the traditional resource use rights and culture of local communities.

EAST KALIMANTAN

Objective 1 – Identify high priority biodiversity resources, describe how specific human activities adversely affect these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented.

Biodiversity analysis

The database on biodiversity resources was based on a combination of past works by WWF in Indonesia by McKinnon & Blower, Frank Mornberg, and this USAID – NRM project. Past funding included the Kalimantan Action Network (WWF Netherlands) which provided funds of US\$2.5 million for an intensive survey on biodiversity resources identification over several areas in Kalimantan, as well as funds from GTZ, WWF-US, and WWF-Germany. This project's contribution toward the database included updated information on elephant range (along the Malaysian border), ground truthing, and GIS data interpretation. The areas covered were lowland forests, heath forests, and peat swamps. Species recorded were categorized into Protected Species, IUCN Status, and CITES listed.

Threat analysis

A list of logging companies operating in the area (HPH), as well as community cooperatives (HPHH) were identified. In addition to this, land cover - land use thematic maps were produced covering Nunukan District. In addition, WWF produced a land-suitability map which showed that only 20% of the land in the district is suitable for agriculture and plantations. Based on this, threats against the Sebuk - Sembakung proposed area of conservation were identified, and scenarios of alternatives were prepared to illustrate impact of activities in the area.

The scenarios presented to the local government included updated data (from satellite images taken in 2001) and field checks with the assistance of local community members. This pragmatic approach resulted in the 3 scenarios regarding the size of the proposed protected areas, ranging from most ideal to minimum requirements for protected areas in the Kabupaten.

So far, the threat analysis was focused more on the functions of the forest in terms of soil conservation and watershed management and less on the protection and/or importance of species. This is not to say that the threat analysis based on soil conservation and/or land use is significantly flawed, but that the explanation to stakeholders (both local government and communities) on what would be lost and/or gained from each scenario was insufficient.

Nevertheless, awareness about the importance of maintaining forest cover, for whatever reasons deemed important to them (e.g. share of fees for timber cut, soil conservation, etc.) has been sufficiently strong to cause local communities to successfully stop a number of

HPHs from operating in some areas. Field checks, however, proved that some logging activities are still taking place, some operating legally, complete with heavy-duty equipment. In contrast, local communities that have been cutting logs in the forests around their villages have been doing so armed with no more than chainsaws and small trucks at the most. The amount of destruction caused by local villagers is considered minimal compared to the large commercial logging companies armed with bulldozers, large trucks, and 700m³ capacity pontoons in the river.

Both local and large-companies logging activities cause environmental degradation. However, WWF realized that the latter would create more damage if their replanting program was not implemented – which unfortunately has been the case to date – i.e. that HPH and KOPERMAS (currently more the latter) are buying timber cut by villagers (and providing them with the equipment to do so). At the same time not only paying villagers compensation/fees for each cubic meter they themselves cut but are also promising replanting of cash crops to benefit that local communities and that these promises are not being kept – both disadvantages the communities and causes environmental degradation.

Lower impact alternatives

Linked with the pragmatic approach previously mentioned, alternative income generating activities were identified, focusing on agricultural activities. Not much was by both the Government and WWF staff on advantages and disadvantages of monoculture plantations such as the oil palm plantation. Oil palm is frequently presented by the Government and/or private investors (read: logging companies) as the best economic development option.

Needs assessment carried out in villages around the Sebuks – Sembakung area revealed people's interest in cash crops such as vanilla, pepper, etc. The uniformity of cash crops identified may indicate lack of options (short, mid, and longer term) for other cash crops that would be more suitable in their areas.

CARE is currently working in a number of villages that are already WWF's local partners, and will be focusing on agricultural and community development activities. The evaluation consultants did not pursue further information on the type of community development activities they will be implementing under their FORMACS⁴³ program.

It should be mentioned here that of the 19 villages along the Sebuks – Sembakung rivers, 4 are transmigrants' and 15 are local Dayak (of a several tribes) villages. The transmigrants are predominantly farmers, and while the Dayaks are hunter-gatherer-farmers. The needs assessment, which yielded answers that are too similar, the methodology toward people making their own decision may be open for debate in that the communities were presented a list of ready answers as opposed to options and consequences (of each choice/option).

Objective 2 - Establish biodiversity conservation as an important planning and decision making criteria, recommending changes to the institutional and legal framework, and educating government and private sectors.

⁴³ FORMACS = Forest Management Carbon Sequestration

Spatial planning

Biodiversity resources identification and threats analysis results are two of the fundamental arguments put forward in the various scenarios presented to the local government for ratification. However, parallel to these efforts, WWF also started to lay the groundwork to ensure the appropriateness and sustainability of the "end result" (i.e. "protected area management as approved by the stakeholders") as explained below:

Institutional and legal framework

Traditionally, Spatial Plans were proposed by local governments (Technical Team on Spatial Plan), with guidelines provided by the Regulations issued by the Ministry of Home Affairs in Jakarta (PerMendagri 8/1998). A Technical Guideline on Implementation of Local Spatial Planning was also issued. The decision to approve the plan would be made at the *Pemda*⁴⁴ Office (executive body of the local government) with heavy influence by the central government.

In Nunukan, however, there has been a new development in that the district has been designated as being subject to "national security issues" since it shares its northern borders with Malaysia, making this a national concern and authority as opposed to a local one. This has led to a further delay in discussion and ratification of the district spatial plan and may well mean that central government has more influence on land use planning in the border area than the district government. }

However, two issues emerged in the current implementation of spatial planning:

- (1) Lack of adjusted regulations and guidelines (for the local government) regarding spatial planning has caused delays in the making the decisions at the local level (i.e. tug-of-war between local and central government),
- (2) Unclear criteria on spatial plan – specifically on natural resources management - has made the inclusion of protected area management criteria an *ad hoc* effort at this stage. No manual has been produced on the process and mechanism by which conservation and/or protected area management criteria should be included in the spatial planning considerations that would enable other Districts and/or WWF projects to adopt (and adapt) the criteria in other Kabupatens/Kotas in Indonesia that include protected areas.

Training

Also parallel to the efforts above, local government officials (*Dinas Pertanahan Daerah, Dinas Tata Ruang, Dinas Lingkungan*⁴⁵) were given GIS training by WWF – NRM. Workshops on issues concerning spatial planning were also carried out and attended by stakeholders (local government, NGOs, local communities). This was an effort toward ensuring sustainability of a more comprehensive spatial plan process in the future, with particular emphasis put on empowering the communities (through awareness raising campaign) and capacity building (of technical staff and decision-makers) at the local government level. It was not surprising to discover that such training (technical on GIS, as well as community participation) was the first carried out in Nunukan District, and was

⁴⁴ *Pemda* = *Pemerintah Daerah* or Local government

⁴⁵ *Dinas Pertanahan Daerah* = District Land Agency, *Dinas Tata Ruang* = District Spatial Planning Agency, *Dinas Lingkungan* = District Environmental Agency

considered an eye opener for many. One successful impact of this training is the fact that *Dinas Pertanahan Daerah* recognised the need for GIS capability within their own office and asked WWF – NRM for advice and specifications on what GIS hardware and software to purchase.

Criteria

The inclusion of WWF – NRM as an official member of the Technical Team for Spatial Plan in Nunukan District was an *ad hoc* effort, since there are no clear criteria that can be used as a reference for protected area management considerations, particularly in the spatial planning preparation process that take place at the Kabupaten/Kota level at the local government. However, should the proposed District Spatial Plan, as initially prepared with WWF-NRM input, be accepted and approved (i.e. “scenario 1”: 600,000 ha are assigned as conservation area in Nunukan District), the success of this approach could be a model that can be studied and perhaps adopted in other districts.

Objective 3 - Strengthen protected area management through participatory planning and facilitation of stakeholder agreements, and test innovative institutional and funding arrangements for protected area management

Protected area management

The term “National” Park is no longer acceptable to many local stakeholders due to its connotation of centralized government. Similarly, the phrase “Protected Area” to the local communities is interpreted as meaning “totally restricted”. Instead, the phrase used by this project is Conservation Area Management, which includes descriptions of activities that are acceptable in different zones of the area in order to ensure sustainability of biodiversity resources.

Stakeholder agreement

Approaches toward stakeholders’ conservation agreements were carried out mostly through meetings, either locally in the village or in Nunukan town (attended by representatives of villages). A more thorough and systematic approach at the local level has not yet been carried out by WWF – NRM, thus meaning this level of effort is very preliminary. This is caused by not building into the project design a community facilitation trainings for local community members (ToT) to carry out facilitation on a regular basis in their own villages. A three-year process without intensive facilitation at the local level, with clear channel of communication to the local government, is too short a time period to yield a “Stakeholder Agreement on Conservation Management” as such.

With regard to the status of the Proposed Conservation Area, the local parliament (DPRD) who are now in charge of approving the Spatial Plan proposed by the *Pemerintah Daerah* (Executive), have not yet approved the Proposed Spatial Plan (with input from WWF). The unexpected problems and pressures caused by the influx of thousands of undocumented Indonesian workers (TKI) from Malaysia have not only delayed the agenda to discuss the plan, but also put more pressure on the district government to establish oil

palm plantations for the economic benefit of Nunukan District and to provide local employment opportunities for the expelled TKI.

Conflicts that occurred in the area appeared to be based on two issues:

1. Cultural, where the transmigration communities favor opening of new areas for their permanent farming activities while the local Dayak communities favor maintaining a balance between their traditional hunting-gathering and agricultural activities.
2. Ownership, where the local Dayak communities would see a differentiation of benefits given between the transmigrants (who are "newcomers"). There appears to be two main issues raised by the local Dayak communities, i.e. the land on transmigration sites rightfully belong to their tribes (hak ulayat), and that development programs may benefit the transmigrants more than the local Dayak communities due to the differences in land use patterns (between transmigrants and Dayaks).

Funding agreements

Innovative institutional funding agreements by the government and/or by local communities toward conservation area management have been discussed in various meetings (workshops, seminars, trainings, community gatherings), where comparisons were drawn against compensation payments and economic development programs provided/promised by logging companies and co-operatives.

So far, this has been an effort to continue the discourse only, including treating "innovative institutional funding" as an important topic to discuss. Therefore, this activity has been more of an awareness-raising tool than an actual testing of an innovative model, which at this case stage is all that can be done in the first three years of this project. International funding has not been ruled out, e.g. from GTZ, but such funding may not be sustainable. The successful experience of the establishment of a *Dewan Pengawas Kawasan Kayan Mentarang*⁴⁶ to manage another protected area in Nunukan and the neighbouring district of Malinau has been used as a model to share with stakeholders in the Sebuku-Sembakung area.

Objective 4 - Develop the capacity of stakeholders in protected area management and bioregional planning through training, workshops and cross-visits
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Capacity building of stakeholders

Sustainability of activities can only be ensured when the capacity building efforts of stakeholders - with regard to conservation area management - are carried out systematically, with appropriate monitoring and evaluation mechanism built into the system. The M&E mechanism is necessary to allow all stakeholders to check their own progress, and to allow modifications as necessary without losing sight of the goal.

Training workshops

⁴⁶ *Dewan Pengawas Kawasan Kayan Mentarang* = Kayan Mentarang Area Supervisory Board, which makes decisions on the management of Kayan Mentarang National Park and includes local community leaders as well as local and central government representatives

Training Workshops on GIS and spatial planning were carried out by WWF – NRM as planned in Tarakan and Balikpapan. Workshops were used as a means for a rapid needs assessment in Nunukan, with the participation of local stakeholders (except the private sector). These workshops also were a means of disseminating information back to the stakeholders.

As a result of these trainings and workshops, WWF NRM in Nunukan is known for the availability of maps for the district. Although the maps were not detailed down to sub-district (*kecamatan*) administrative boundaries, they are more comprehensive and detailed than those previously available to the local government. The frequency (which tend to increase in the third year of the project) of stakeholders coming to request such maps is a good indication of how maps produced by WWF are more and easily accessible than from the local government. At the same time, WWF also seized the opportunity to get information from these stakeholders, and take action to update their information database as necessary.

Cross-visits

Cross visits were designed as a means to provide the stakeholders with alternative perspectives on conservation area management. Participants of such activities also included relevant local government and representatives of local communities.

Both the training workshops and cross visits have been appropriately designed to take place in the latter part of the project, after a degree of trust was built through intensive communication between WWF – NRM and the stakeholders/partners. Cross visits may not be enough to encourage better practices of conservation management, or to encourage local farmers to establish demonstration plots. More work still needs to be done to ensure that lower impact alternatives – preferably with economic benefits to the communities – can be tested and/or implemented. Cross visits should also not be restricted to Java only, but also to other areas in Kalimantan that have success stories (e.g Kayan Mentarang)

IV. CONCLUSIONS & RECOMMENDATIONS

1. CONCLUSIONS

For Nunukan, approximately 80-90% of the outputs have been produced according to the workplans. For Sorong, on average 75-80% of planned outputs have been achieved in each of the three years of the project. From the above analysis, the following conclusions can be drawn.

(a) Achievement of objectives⁴⁷

⁴⁷ See Annex IV: Achievements against workplans: Sorong and Nunukan

Objective 1

Biodiversity Analysis

1. Areas with high priority biodiversity resources have been identified largely based on bringing together existing information and knowledge
2. Activities have added to existing knowledge on:
 - a) Local distribution of some species from results of Rapid Biodiversity Assessments and specific research/surveys on turtles and elephants
 - b) Resource use patterns and 'tenurial' rights of traditional communities (although these data are still very general and more in-depth study is needed)

Threat Analysis

3. Specific threats to chosen sites have been identified and in a number of cases have been significantly decreased e.g. predation of turtle eggs, halting of illegal logging in JMTU. In Nunukan, a number of logging companies were temporarily stopped from operating due to pressure from the local communities.

Lower impact alternatives

4. Some locally appropriate income generation activities to reduce communities' dependence on unsustainable exploitation of forest resources have been identified and initial capacity building has taken place. It is too early to tell how successful these activities will be especially given cultural factors which mean people are not used to planning and managing activities in a systematic manner and therefore require on-going facilitation and support. In addition, WWF is 'in competition' with logging companies who also promise local communities economic and community development opportunities (e.g. through planting of cash crops, building of roads, schools, churches etc) and even more attractive immediate cash returns in the form of fees/compensation for timber cut from their traditional lands

Increase in area of protected resources

5. The process of biodiversity resources being provided protected status under law has been facilitated (through incorporation into spatial plans) although these have yet to be ratified. Should the current proposed spatial plans be adopted then the area of protected resources in both districts will have been increased.

Objective 2

Educating government officials & private sector

6. Awareness of the need to protect high biodiversity ecosystems in order to maintain ecological processes and to conserve high profile species has been increased among local government
7. There has been resistance from private sector interests e.g. HPH/KOPERMAS, oil palm investors

Institutional and legal framework

8. Recommendations have been made for designation of protected area status under local government regulations (through incorporation in spatial plans) in both districts.

Criteria

9. Criteria for protection in Terms of Reference for Spatial Plan compilation are still based on biophysical conditions, with little consideration of biodiversity.
10. Inclusion of biodiversity conservation criteria are still done on an *ad hoc* basis, for example through the inclusion of WWF-NRM as a member of the Spatial Plan Technical Team in Nunukan, as opposed to being institutionalised in the Guidelines for Spatial Plan compilation and implementation, at all levels (local, provincial, national)

Objective 3

Participatory planning

11. After some initial problems with the approach, serious efforts have been made to facilitate participatory planning with all stakeholders through socialisation of concepts and methods, multi-stakeholder meetings, PRA etc.

Stakeholder agreement

12. In Papua, the communities' statements produced as a result of the public consultation process could form the basis of future stakeholder agreements on community based protected area management in JMTU. In Nunukan, the public consultation mechanism did not produce a similar stakeholder agreement as such.

Funding arrangements

13. Innovative funding mechanisms, such as the Papua Trust Fund, have been initiated. In both districts, alternative economic development programs have been implemented with local communities as a mechanism to ensure income generation activities are in keeping with protected area management.
14. Allocation of local government budget for sustainable community development activities has been lobbied for, with some success e.g. subsidy of air transport for in Sorong (air fare reduced from Rp.300,000 to Rp.150,000 per person, with the remaining Rp150,000 subsidized by the local government). However, this may not be sustainable as air transportation may limit the type of agricultural produce that can be carried on the plane.

Objective 4

Capacity building

15. Based on comments from stakeholders interviewed, capacities have been increased both within local government and NGOs/LMAs although this process has not been consistently monitored by the project

(b) Sustainability of achievements:

16. The incorporation of the proposed areas into the district spatial plan and ratification under local government regulations is only the first step. To ensure sustainability the next stage would be to facilitate local communities and government to formulate a model of protected area management which acknowledges and accommodates traditional land use rights, as well as conservation of biodiversity. Initial support would also be needed in the implementation of such a model, including ensuring the enforcement of appropriate local policy and regulations, and participation of all stakeholders

(c) Replicability:

17. The program process in Papua can be seen as strategic in terms of its approach to community involvement in biodiversity conservation and in bridging local and central government. Initially this was the case in Nunukan, East Kalimantan, but currently the pressure has shifted to Border Security and became a national issue again. Therefore, the efforts toward ensuring an integrated spatial planning approach (with protected area management issues incorporated) designed to yield a result of a Spatial Plan approved by the local government (DPRD, Bupati) be weakened, as it would now be taken by the central government that may not take conservation and or protected area management issues into account.

(d) Challenges:

18. To facilitate a community-based protected area management model which recognises the traditional resource use rights of the local communities and which incorporates alternative economic development activities
19. To compile more detailed biodiversity, socio-economic and natural resource valuation data to form the basis for proposals to increase the area of protected resources and to influence spatial planning and economic development policy on wider scale (i.e. not just site-based).
20. How to work within the context of decentralisation to ensure effective biodiversity conservation within the framework of district and provincial level spatial planning

(e) Opportunities arising from decentralisation:

21. There is potential for more local control of natural resources – stronger voice/role of local community; ability of local government to issue PERDA relevant to local situation, which would be potentially stronger and more likely to be enforced than nationally imposed regulations; local accountability of DPRD to their constituents
22. Local governments, especially in new districts, are more open to input from organisations like WWF who are seen as neutral bodies with the means to acquire data and access expertise currently lacking within local government

2. RECOMMENDATIONS

Given the substantial achievements made so far, and the unique advantage of WWF in that they are seen as a credible, neutral/independent sustainable development organization by both local government and local communities/organizations, the following recommendations are made:

1. Using the remaining budget still available at the end of the project, **USAID - NRM approves a no cost extension** for WWF with the proviso that monies are used effectively to achieve specific and realistic targets within the time of this extension, e.g.

	Activities	Nunukan	Sorong
(a)	Participatory survey & mapping to determine traditional resource rights distribution	✓	✓
(b)	Intensive lobbying of Bupati and DPRD toward adopting a sustainable development based Kabupaten Spatial Plan which includes the proposed conservation areas (PERDA, to be approved, or at the very least be on the agenda, before end of December 2002)	✓	✓
(c)	Updating and dissemination of GIS data to relevant stakeholders as necessary	✓	✓
(d)	Implement on-the-job training for Dinas Pertanahan Kabupaten Nunukan GIS staff	✓	
(e)	Continue campaign and socialisation of conservation and sustainable development concepts (esp. CB-PAM I Sorong ⁴⁸)	✓	✓
(f)	Analysis on alternative suitability of land use for oil palm in relation to spatial planning development	✓	
(g)	Work with others to better develop follow-on program (or revisit proposal already prepared) to optimise WWF's strengths and ensure stronger capacity building efforts	✓	✓

More detailed matrices of activities which could be undertaken at each site in order to complete unfinished activities in the workplan can be found in *Annexes VIII & IX*.

2. **WWF to continue activities in both areas in the medium term (3-5 years) through:**
 - a. Further strengthening efforts toward institutionalising sustainable development based Spatial Planning, based on current achievements and WWF's established advantage in both sites e.g. lobby and build capacity of local government to develop policy, regulations, sanctions, law enforcement ability to support agreed Spatial Plan

⁴⁸ Community based protected area management

- b. Building capacity of local government and civil society (communities, traditional community institutions and local NGOs) to sustainably manage resources within and outside protected areas through:
 - i) Provision of data, advice, awareness raising – including solid, clear evidence of the economic benefits of maintaining diverse ecosystems;
 - ii) Technical training – management, legal drafting, journalistic;
 - iii) Identification and facilitation of alternative income generation/ revenue raising activities
- c. Revisiting staffing and budget requirements to best address issues identified during the duration of this project.
- d. Identifying and collaborating with local, regional, national, and international partner organizations/institutions to enhance participatory capacity building efforts and optimise achievements in both sites

V. LESSONS LEARNT

(a) Effects of Decentralization

1. The speed and effects of decentralization were underestimated but have had major influences on the structure, activities and achievements of the project. Papua with its Special Autonomy status poses different sets of issues in dealing with local government, communities and *Lembaga Adat* than those faced in Nunukan.

(b) Socio-economic and cultural conditions

2. Recognition that the situation (socio-cultural, economic, political and biophysical factors) in every district/area will be different so that the appropriate activities and the rate and level of progress will therefore also vary between areas
3. The economic needs of the local communities need to be taken into account in conservation planning
4. It is important to understand the structure of traditional communities, how decisions are taken and the system of representation to ensure that socialisation of the mission of the project is communicated clearly to all and that the aspirations of all members of the communities are represented.

(c) Program management

5. Some deficiencies in the management of consultants in both sites has meant that some data and reports from external consultants have not been received and this has caused delays in other activities dependent on the results in these reports.

6. Recognition of needs for other specialists and/or lobbyists: similarities and differences in each site. In both places, an anthropology specialist is needed, especially in Papua, to help understand the structure and culture of *Lembaga Adat*. A community facilitator/trainer is also needed in both places, to help the local community empower themselves through a process of community participation.
7. Proposals for protected area status require participatory planning and continuous socialisation to the local communities involved. The concept and model of community-based protected area management must come from the communities themselves (bottom-up approach). There is a need to recognise that such an approach is a long process, which requires flexibility both in terms of timeframe and in terms of activities.
8. The need for an integrated approach – a basis of strong scientific, spatial and economic data, expertise in spatial planning, understanding of local communities, and lobbying skills- in order to effectively promote biodiversity conservation at a bioregional scale
9. There has been an under-utilization of biodiversity data in both sites to promote the importance of biodiversity conservation rather than just the importance of maintaining vegetation/forest cover. WWF could tap their own existing databases as well as those of their local, national and international networks to provide information in a form that local communities and decision makers can understand.
10. Monitoring and Evaluation systems need to be designed and implemented to include documented baseline information on biophysical data and existing capacity, awareness and behaviour of beneficiaries. Methods and indicators for measuring improvements from the baselines then need to be devised and the results documented to provide more substantial evidence of progress towards objectives rather than just completion of planned activities. Finally, it is suggested that monitoring and evaluation is seen as a process for reflection and learning within and between projects with the overall aim to improve methodology and increase progress through learning from experience.

VI. UNRESOLVED ISSUES

Two issues that may be considered as “unresolved”. Albeit that these are not a direct impact of WWF-NRM USAID project; they would nevertheless have an affect on future projects in the area:

1. National Border Security – as illustrated in previous explanations (e.g. Nunukan: bordering Malaysia) – in which the central government takes precedence over local government authority.
2. Special Autonomy in Papua – at which level the local autonomy rests, in particular with protected and/or conservation area management issues: provincial or kabupaten level?

Future projects to be designed need to look closely at these issues to ensure that appropriate measures are taken to address them.

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Annex I: Scope of Work of independent, external evaluation team

TERMS OF REFERENCE (FOR EVALUATION TEAM)

Statement of Work for Evaluation of the Natural Resource Management Program (NRM)

*Cooperative Agreement between USAID and WWF Indonesia,
No. 497-A-00-00-00002-00*

The Outer Island Bioregional Program: Integrated Protected Area Management and Spatial Planning in Kalimantan and Papua

Activity to be assessed:

The implementation of Cooperative Agreement between the United States Agency for International Development (USAID) and Yayasan WWF Indonesia (WWF/I) on NRM Program entitled 'The Outer Island Bioregional Program: Integrated Protected Area Management and Spatial Planning in Kalimantan and Papua'

A. Background

In October 28, 1999, USAID and WWF/I had signed a Cooperative Agreement for the implementation of The Outer Islands Bioregional Program: Integrated Protected Area Management and Spatial Planning in Kalimantan and Papua. It is called WWF Indonesia – NRM/USAID Program. The length of program is three years, which started from 21 October 1999 and will be completed by October 27, 2002. The total amount of financial resources funded by USAID was estimated at Rp14,739,416,092.

The program is implemented by WWF/I full time staff consisting of a Project Coordinator, Project Managers, Bioregional Planners and Administrative Support Staff in both provinces. Additional works were and still are done by consultants on part time basis. In addition the program should collaborate with NRM-2 partners, the Nature Conservancy (TNC), Conservation International (CI), local NGOs, Kemala, local governments and the private sector.

Section 1.7 (c) of the Agreement requested the recipient (WWF/I) to arrange for an independent, external evaluation two months prior to the completion of the program. This is the legal basis for these terms of reference.

For the implementation of this program, two priority areas were selected, Sebuku-Sembakung watersheds in Nunukan district, East Kalimantan province, and Jamursba Medi – North Tamrau that is situated in the Vogelkop (Bird's Head) area, Sorong and Manokwari districts, Papua province.

• Sebuku-Sembakung watersheds

The rationale for selecting Sebuku-Sembakung as the place for developing a spatial planning model for bioregional approach is because in terms of geographical setting, Sebuku-Sembakung has strategic values. Sebuku-Sembakung area is located along the border with Sabah State (Malaysia) which shares similar ecoregion.

Sebuku-Sembakung has a rich but threatened biodiversity area consisting of five ecosystem-types of forests that exist in Kalimantan. The area is not only rich in land-based resources which include

resources in montane, moist and heat forests, but also in water-based resources which include those in peat swamp forests and mangroves. This unique feature has been generating benefits for many generations by providing economic goods such as timber, traditional medicines and food, and ecological services such as water regulation, protection from erosion, shelter for local people and flood mitigation. Furthermore, the area has been functioning as an important habitat for many populations of endangered wildlife such as Elephant (*Elephans maximus*), Buffalo (*Bos javanicus*), Orangutan (*Pongo pygmeus*) and Proboscis Monkey (*Nasailis larvatus*). However, its status is still an unprotected area. Consequently, destructive and illegal logging has occurred intensively for more than two decades in this area, particularly in the forest along the border of East Kalimantan and Sabah State, Malaysia.

- **Jamursba Medi – North Tamrau**

The rationale for selecting Jamursba Medi – North Tamrau as a priority area is because in terms of nature conservation and scientific knowledge development, Jamursba Medi coastal area and North Tamrau montane forest have high strategic values. For Jamursba Medi, the area is not only an ideal place for marine biological research but also acts as a living museum for the conservation of the coastal community culture in Papua, especially of those living along the coast of the Kepala Burung Cape. In other words, the Jamursba Medi coastal area has a very good prospect in socio-culture development. This development can play a significant role for the future development of the area that integrates conservation activities and the development of community-based natural resource management, eco-tourism and biological research.

Jamursba Medi coastal area also plays an important part for biodiversity conservation especially for the endangered leatherback turtles (*Dermochelys coriacea*). The area is the fourth largest beaches in the world for sea turtles to lay their eggs after Kuala Trengganu (Malaysia), French Guyana and Suriname. For leatherback turtles, this coastal area is classified as one of the largest place in the world, where this species of turtles lays their eggs. Other species of turtle also nest in the Jamursba Medi area such as Green turtles (*Chelonia mydas*), Hawksbill turtles (*Eretmochelys imbricata*) and Olive Ridley turtles (*Lepidochelys olivacea*).

The health of the coastal area also depends on the preservation of the surrounding forest area, North Tamrau. The Jamursba Medi coastal area is part of the same ecosystem as the North Tamrau forest area. For example, excessive sedimentation from cleared forest area effects the quality of the sand that the turtles will lay their eggs in. Hence by protecting the forest the turtles nesting habitat is protected and at the same time this will protect other endemic species that live in this forest region, including mammals (tree kangaroos, cuscus), reptiles (iguana, snakes) and birds (birds of paradise, cockatoos, parrots, cassowary). Some of these animals are endemic or also endangered and protected by Indonesian law.

Recent development towards regional autonomy and political power decentralization leads to new opportunity and responsibility as well as challenges for regional and local authorities, in collaboration with local communities, which they represent. This collaboration is essential to establish and regulate biodiversity priority areas embedded in their regional setting.

An important approach of WWF – NRM/USAID is therefore, to encourage and support local and regional stakeholders' initiatives and implemented efforts toward integration of biodiversity conservation within the overall regional development. This is based on a process driven by stakeholders' interests, targets and commitments. The ideal output of the process is establishment of biodiversity conservation areas by local government together with local communities.

- **Program Objectives**

The overall goal of this project is to strengthen institutional capacity, participatory planning and effectiveness in achieving biodiversity conservation at a bioregional scale. The goal is achieved through the following four objectives as listed below:

- Objective 1: Identify high priority biodiversity resources, describe how specific human activities adversely impact these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented. This objective has two components, namely: (A) biodiversity analysis, and (B) threat analysis.*
- Objective 2: Establish biodiversity conservation as an important planning and decision-making criteria by developing and testing concepts and techniques, recommending changes to the institutional and legal framework, and educating government officials and the private sector.*
- Objective 3: Strengthen protected area management within priority bioregions through participatory project planning and facilitation of stakeholder agreement, and test innovative institutional and funding agreements for protected area management in Kalimantan and Irian Jaya.*
- Objective 4: Develop the capacities of stakeholders in protected area management and bioregional planning through training workshops and cross-visits.*

- **Beneficiaries**

The ultimate beneficiaries of the program are :

1. Provincial, district, sub-district government and National Park Staff
2. Local communities living in and around the proposed protected areas
3. The private sector related to mining, agriculture and forestry

The expected intermediate beneficiaries of the project are:

1. The Ministry of Forestry (DG PHKA)
2. The Ministries of Home Affairs, Mining and Energy, Public Works, Tourism and Transmigration at central level

B. Objectives of the Program Evaluation

- *Main objectives of this evaluation*

1. To produce an independent evaluation of project implementation to date, referenced to proposed objectives and workplans by particularly focusing on conservation achievements, capacity building (local government, community and local NGOs), partnerships (stakeholders framework), and local government and community acceptance of the NRM program.
2. Review work-plans proposed for the remainder of the project period with regard to likelihood of the project to achieve its objectives.
3. Provide recommendations for improving current activities or for alternative courses of action.

- *Specific objectives*

Project identification and design

- a. Review on framework condition relevant to the project with respect to the changing political, social, institutional, and economic situation during the project design.
- b. Assess the appropriateness of the project's objectives and approaches in the context of the current policy framework for natural resources management in Indonesia.

- c. Assess whether the pre-conditions and the special conditions of the Cooperative Agreement have been met, and assess the impact of any conditions that have not been met during the project implementation.
- d. In light of the progress of the project to date, identify any problems that are likely to arise during the lifetime of the project due to Cooperative Agreement conditions superseded by events, and make justifications for such amendments and modifications.
- e. Similarly review the project's Annual Workplans, keeping in mind that the project is involved in participatory processes that demands a mechanism which allows the project to respond in a flexible manner to changes (e.g. the implementation of decentralization, etc) as knowledge on management effectiveness of protected areas and other natural resources is accumulated.

Project implementation

- a. Assess to what extent the project is achieving the expected results and objectives established in the Cooperative Agreement and Annual Workplans and assess whether the distribution of financial resources between the two project areas continues to be realistic.
- b. Assess and make recommendations on the appropriateness of the project management organization structure, working mechanism, staffing (including part time experts) and networking.
- c. Examine the extent to which the concepts and methodologies generated by the project have been implemented by the beneficiaries.
- d. Review the participatory level of the stakeholders during project implementation and monitoring.
- e. Assess and make recommendations on potential replication of project's results to other areas.
- f. Assess and make recommendations on potential sustainability of the results. Indicate the gaps and recommend alternatives if there are problems of program sustainability.
- g. Recommend priority program components/activities for the future.

C. Important questions

In order to understand to what extent the main objectives of NRM Program have been achieved, there are important questions that need to be answered.

General questions:

1. To what extent have the workplans that have been established consistently applied in the implementation of NRM program?
2. To what extent have current available resources been optimized and what additional resources or time are required to meet project goals?
3. Is the approach that is used appropriate to local government and community?
4. Has the internal management of WWF Indonesia succeeded in supporting the implementation of the project, in terms of organization, technical guidance and financial disbursement?

Regarding objective 1: *Identify high priority biodiversity resources, describe how specific human activities adversely impact these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented. This objective, has two components, namely: (A) biodiversity analysis, and (B) threat analysis.*

questions need to be answered:

5. Had biodiversity assessment and social economic studies of priority areas been conducted?
6. Are there any demonstration plots and/or field activities that had been conducted as an example of good practice of natural resources management ?
7. How does local community respond to example of good practice of natural resources management ?
8. What is the situation regarding illegal logging and desecration/environmental degradation in the Priority Areas?
9. Do the NRM strategies reduce degradation of the environment within the priority (protected) areas?

Regarding objective 2. Establish biodiversity conservation as an important planning and decision-making criteria by developing and testing concepts and techniques, recommending changes to the institutional and legal framework, and educating government officials and the private sector.

Questions need to be answered:

10. Is the project goal attainable/realistic?
11. What impediments have been encountered and have significantly prevented the implementation of the project? Is the existing enabling environment a factor in Project success?
12. What significant lessons can be learned from the Project?
13. What will be the predicted impacts on the long-term success related to decentralization on NRM Program?
14. Which stakeholders have the greatest impact on the Project, and has collaboration with them been satisfactory? How can collaboration be improved?
15. Are there unexpected positive and negative impacts of the project?
16. What are the important recommendations for improving NRM Program in the next future?

Regarding objective 3. Strengthen protected area management within priority bioregions through participatory project planning and facilitation of stakeholder agreement, and test innovative institutional and funding agreements for protected area management in Kalimantan and Papua.

Questions need to be answered:

17. Has there been a determined attempt to increase conservation funding for NRM Program?
18. What should be the follow up direction of this project to ensure maximum leverage for conservation in the Priority Areas and other conservation/ protected areas in East Kalimantan and Papua, and elsewhere in Indonesia?
19. At present, what is the status of the Proposed Conservation Areas?
20. Is there a process to resolve conflicts between the community and other stakeholders (local government, private sectors, etc)?

Regarding objective 4. Develop the capacities of stakeholders in protected area management and bioregional planning through training workshops and cross-visits.

Questions need to be answered:

21. How intensive is local community involvement in the activities of NRM Program, and how does the community access to of NRM Program?
22. What kind activities that had been organized with regards to the improvement of the capacities of stakeholders?
23. Has the project activities been socialized to concerned stakeholders? How and what are their responses?

D. Deliverables

By the end of the evaluation period, the team will produce a final report. The report will be prepared and presented to USAID and WWF/I in Jakarta. The report should contain the team's findings and conclusions and recommendations.

The Final Project Evaluation Report will be submitted to WWF/I within one week after the team's presentation of field findings and draft report. WWF/I and USAID will comment on the draft within three days. Reproduction of the final report will be done by the project.

The final report should be no more than 30 pages, excluding annexes. The report should adhere to the following format – although others formats may be considered on request from the team.

- a. Executive summary
- b. Introduction.
- c. Project objectives.
- d. Findings – facts collected by the team concerning performance or factors influencing performance.
- e. Conclusions and recommendations – describing achievements of project objectives and proposed actions for follow-up activities of this project.
- f. Lesson learns – broader implications for similar programs in different setting or for future activities.
- g. Unresolved issues.
- h. Annexes as needed.
- i. References.

The report is in English, and shall be submitted in both hard copy and electronic format.

E. Evaluation Methods

An initial consultation in Jakarta shall be conducted to familiarize with the cooperative agreement, both through a review of available literature and selective interviews with Project Coordinator of WWF/USAID-NRM program, Technical Consultant of WWF/USAID-NRM Program, other WWF Staffs, PKA Staffs, Deputy Director Forest of WWF, and Program Managers NRM of USAID. This is to be followed by field visits to project sites to assess the performance of the project through process of a direct evaluation of achievements and selective interviews with representatives of the community around the project areas, partner organization, BKSDA, Dinas Kehutanan, Bappeda Kabupaten Nunukan and Sorong, DPRD Kabupaten Sorong and Nunukan, Local NGOs, *Lembaga Masyarakat Adat* (LMA), CARE, Project Manager of WWF/USAID-NRM Program in Nunukan and Sorong, staffs of WWF/USAID-NRM Program in Nunukan and Sorong and WWF Indonesia Directors for Sundaland Kalimantan and Sahul Papua.

F. Composition of the Evaluation Team

The evaluation team will consist of two specialists. A conservation biologist or a natural resources management specialist and institutional capacity building specialist. This two-persons team will consist of a team leader and a member and will work complementarily.

Team Leader

This specialist will have an appropriate advanced degree and at least 10 years of relevant experience including 5 years field experience in regional development, project management and project evaluation. The specialist should possess a wide experience on natural resources management. Previous working experience in outer island and familiarity with the logical framework methodology are essential.

Team Member

Specialist within the team who shall have an advanced degree in forestry and a minimum of 10 years working experience. This will include practical experience with government agencies, laws and regulations, capacity building, the forestry-private sector, and non-governmental organization institutions related to forestry. Previous working experience with community participation is essential.

G. Procedures, Schedules, Logistics and Budget

The evaluation should occur over a three-week period beginning on first week of September 2002. The work will be started in Jakarta for initial project briefing and familiarization with project's background information and reports, consultation with project partners and donor. Field trips will be conducted to project sites in Sorong and Nunukan for obtaining direct inputs on project progress and constraints. Interviews and discussions will be done with project managers and staff and other relevant stakeholders. Report writing can be done simultaneously both in the field and Jakarta. presentation of draft and final reports will be done in Jakarta.

Schedule

- Briefing/discussion at the WWF and USAID Office in Jakarta 1 day
- Review files and meeting in Jakarta 2 days
- Travel to East Kalimantan 5 days
- Travel to Papua 5 days
- Preparation of the report 6 days
- Finalization of Final Report 2 days

Total team days 21 days

Workplan

The evaluation team will start to work from 18 September 2002 and for a period of a further 26 working days.

Activities/Days	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Briefing at Jkt	x																								
Review Files		x	x																						
Fly to Sorong				x																					
Interview in Sorong					x	x	x																		
Fly to Jkt								X																	
Fly to Nunukan									x																
Interview in Nunukan										x	x	x													
Fly to Jkt													x												
Report writing				x	x	x	x	X	x	x	x	x	x	x	x	x	x	x	x	x					
Presentation on field findings and draft report to WWF/I																x									
Draft report presentation to USAID																		x							
Submit Final report to USAID																					x				
Date (September – October 2002)	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12
	September														October										

Budget :

Total estimated budget is Rp150,000,000

which incorporates:

- Professional fee for the evaluation team members (\$268.75/person including taxes) in 21 days: Rp95,943,750
- Field visit costs (airfare and accommodation) in East Kalimantan (5 days): Rp10,000,000
- in Papua (5 days): Rp16,000,000
- Meetings and presentation Rp20,000,000
- Reporting Rp8,056,250

H. Key Contact Persons

To be able to conduct effective and transparent evaluation, the team needs to meet or contact some important persons as follow:

WWF Indonesia:

In Jakarta:

- Agus Purnomo, Executive Director
- Dewi Suralaga, Director of National Program
- Emil S. Tarigan, Director of Internal Services
- Agus Setyarso, Deputy Director for Forest Program
- Fitriani Ardiansyah, NRM Project Coordinator
- Jahja Hanafie, NRM Technical Consultant (Former NRM Project Coordinator)
- Zulfira Warta, Ecoregional Planner for Tesso Nilo (Former NRM Project Manager in Papua)
- Klaas Jan Teule, Program Development Manager (Former Acting Director of Sahul Region Papua)

In East Kalimantan:

- Tonny Soehartono, Director of Sundaland Region Kalimantan
- Wawan Ridwan, NRM Project Manager in Nunukan
- NRM Project Staff in Nunukan
- Paul Kimman, Former NRM Project Manager in East Kalimantan

In Papua:

- Benja V. Mambai, Director of Sahul Region Papua
- Suhandri, NRM Project Manager in Sorong
- Rudy Wondowoi, Ecoregion Coordinator of Bird Head
- John Maturbongs, Species Conservation Manager of Papua (Former Head of WWF Indonesia-Sahul Region, Sorong Office)
- Roy Rindorindo, Communication Manager of Papua
- NRM Project Staff in Jayapura, Sorong and Manokwari

REM/USAID Jakarta:

- I Ketut Djati, Project Manager
- Anne Peterson, Deputy Director
- Fred Pollock, Director
- Wouter Sahanaya, Environmental Officer

The Ministry of Forestry:

- I Made Subadia, Director General of Forest Protection and Nature Conservation (PHKA)
- Widodo S. Ramono, Director of Area Conservation

Stakeholders in East Kalimantan:

In Samarinda:

- Head of BKSDA (Office for Natural Resource Conservation)

In Nunukan:

- Head of District (Bupati)
- Head of District Development Planning (Bappeda)
- Head of District Forestry Office
- Head of District Land Use Office
- Other relevant district agencies
- District Spatial Planning Team
- District Parliament
- Relevant NGOs and media

Stakeholders in Papua:

In Jayapura:

- Head of Forestry Provincial Office

In Sorong:

- Head of District (Bupati)
- Head of District Development Planning Office (Bappeda)
- Head of District Spatial Planning Office (Dinas Tata Ruang)
- Head of District Forestry Office
- Relevant NGOs, traditional community organizations and media

Annex II: List of stakeholders interviewed

West Papua	
Name of institution	Person interviewed
District Head/Regent's Office <i>Kantor Bupati Kabupaten Sorong</i>	<ul style="list-style-type: none"> Drs. Tri Budiarto District Secretary (<i>Sekretaris Daerah</i>)
District Planning Agency <i>BAPERDA Kabupaten Sorong</i>	<ul style="list-style-type: none"> Drs. Hendrik Sagrim Msi. (Head of R&D - <i>Kepala Bidang Litbang</i>) Luther Salamala (Staff of Community Services Section - <i>Staf Baperda Bidang Pelayanan Masyarakat</i>)
Natural Resources Conservation Office, Region II <i>Balai KSDA Papua II</i>	<ul style="list-style-type: none"> Ir. Constan Sorondanya (Head -- <i>Kepala</i>)
District Environment and Sanitation Service <i>Dinas Lingkungan Hidup dan Kebersihan Kabupaten Sorong</i>	<ul style="list-style-type: none"> Natanael (Head of Pollution Monitoring and Control sub section - <i>Kepala Sub Dinas Pemantauan dan Pemulihan Pencemaran</i>) Agustinus Asem (Head of Preventative Investigation section - <i>Kepala Seksi Kajian Preventif</i>)
District Spatial Planning Office <i>Dinas Tata Ruang Kabupaten Sorong</i>	<ul style="list-style-type: none"> Fredrik Yomame SS. (Head of Spatial Planning and Development section - <i>Kepala Sub Dinas Tata Ruang dan Pembangunan</i>) Ir. Samuel Siada (Head of Planning Section - <i>Kepala Seksi Perencanaan</i>)
District Forestry Service <i>Dinas Kehutanan Kabupaten Sorong</i>	<ul style="list-style-type: none"> Ir. Hendrik Runaweri (Acting Head - <i>PJS Kepala</i>)

West Papua	
Name of institution	Person interviewed
Local Environmental & Cultural NGO, Sorong <i>Yayasan Pengkajian Adat dan Lingkungan Vogelkop (YAPALVO) Sorong</i>	<ul style="list-style-type: none"> • Melky Muabuay • Nevy Noya
Malamoi Traditional Community Institution <i>LMA – MALAMOI Sorong</i>	<ul style="list-style-type: none"> • Samuel Mainolo (Head - <i>Ketua</i>)
Abun Traditional Community Institution <i>Lembaga Masyarakat Adat Papua Suku Abun (LEMAPSA)</i>	<ul style="list-style-type: none"> • Marthen Yewen (Secretary - <i>Sekretaris</i>)
Karon Traditional Community Institution <i>Lembaga Masyarakat Adat Karon (LEMAKA)</i>	<ul style="list-style-type: none"> • Simon Yekwam (Head - <i>Ketua</i>) • Albert Yewen (Advisory Board Member - <i>Badan Penasehat</i>) • Gaspar Baru (Advisory Board Member - <i>Badan Penasehat</i>) • Kornelis Baru (Secretary - <i>Sekretaris</i>)
Local Conservation and Community Development NGO, Raja Ampat <i>Lembaga Konservasi dan Pembangunan Masyarakat Raja Ampat Sorong (KONPERS)</i>	<ul style="list-style-type: none"> • Lipmi Dimalouw (Head - <i>Ketua</i>)
Sub-district administration, Sausapor	<ul style="list-style-type: none"> • Village Head (<i>Pak Camat</i>)

West Papua	
Name of institution	Person interviewed
WWF Sahul Bioregion	<ul style="list-style-type: none"> • Drs. Benja Mambai (Sahul Bioregion Director, WWF Jayapura) • Ir. Suhandri, WWF-NRM Program Manager & Senior Bioregional Planner, Sorong • Rudy Wondowoi (Birds Head Eco-region Action Program Manager, Manokwari) • Johanes Maturbongs SE (ex Program Manager Sorong, currently Species Trade Program Sahul Bioregion, Jayapura) • Roy Rindo-Rindo (WWF Sahul Bioregion, Advocacy/Campaigns Program, Jayapura) • Lukas Rumetna, Community Organiser, WWF Sahul, Sorong • Creusa Hitipeuw MSc, Co-ordinator WWF Sahul Bioregion Species & Marine Target Driven Program

East Kalimantan	
Name of institution	Person interviewed
Nunukan District Parliament <i>DPRD Kabupaten Nunukan</i>	<ul style="list-style-type: none"> • H. Mansyur (Head - <i>Ketua</i>)
District Land Agency, Nunukan <i>Dinas Pertanahan</i>	<ul style="list-style-type: none"> • H. Darmin Jumadil, SH (Head - <i>Kepala</i>)
District Planning Agency, Nunukan <i>BAPPEDA</i>	<ul style="list-style-type: none"> • Sutan Siburian, S.Si Head of General Planning Sub-section (<i>Kepala Subagian Perencanaan Umum</i>)

East Kalimantan	
Name of institution	Person interviewed
PT. PERHUTANI	<ul style="list-style-type: none"> • Ir Sangudi Muhammed Head of East Kalimantan Forest Area Management Unit (<i>Kepala Satuan Pengelolaan Areal Hutan Kaltim</i>) Ir Susilo B.W.(Staff)
Kunyit village	<ul style="list-style-type: none"> • Drs Roben Jungkat Community member (<i>Tokoh masyarakat</i>)
Sekikilan Village	<ul style="list-style-type: none"> • Cornelius Karnain Village Head (<i>Kepala Desa</i>)
NGO Autonomy Centre	<ul style="list-style-type: none"> • Muhammad Sain
Tikung River traditional communities <i>Masyarakat Adat Sungai Tikung</i>	<ul style="list-style-type: none"> • Pangeran Ismail Customary Leader (<i>Kepala Adat</i>)
WWF Sundaland Bioregion	<ul style="list-style-type: none"> • Tonny Suhartono PhD, WWF Sundaland Bioregion Director • Halim Rizal, Finance Manager WWF Sundaland • Ir Wawan Ridwan, PM WWF-NRM Program Nunukan • Adi Sudarmanto SIP, ex Community Organiser, WWF-NRM Nunukan • Drasopolino MSc, Senior Spatial Planner, WWF-NRM Nunukan • G. Manjela Eko Hartoyo SSi, GIS Specialist WWF-NRM Nunukan

Jakarta	
Name of institution	Person interviewed
WWF Indonesia, Jakarta office	<ul style="list-style-type: none"> • Agus Purnomo, Director • Dewi Suralaga, National Program Director • Fitriani Ardiansyah MSc, WWF-NRM Program Coordinator • Jahja Hanafie PhD, ex WWF-NRM Program Co-ordinator, now WWF-NRM consultant • Agus Setyarso PhD, Deputy Director for Forest Program • Emil Tarigan, Internal Services Manager • Klaas Jan Teule, ex Acting Director WWF Sahul Bioregion, currently WWF Indonesia Program Development Manager
Independent Consultant	<ul style="list-style-type: none"> • Miriam van Heist, Team leader NRM-EPIQ evaluation team
USAID/REM	<ul style="list-style-type: none"> • I Ketut Djati, Program Manager • Anne Peterson, Deputy Director • Carey Yeager, Conservation Advisor
Directorate General Spatial Planning, Ministry of Settlements and Regional Infrastructure <i>Ditjen Tata Ruang, Kimpraswil</i>	<ul style="list-style-type: none"> • Budi Situmorang, Head of Sub-directorate of National Spatial Planning

Annex III: Itinerary of Evaluation Team 18th Sept. – 16th Oct. 2002

	Date	Activities
1.	18-Sep-02	- Contract signed. - Interviewed Klaas van Teule (ex WWF Papua) - Literature review
2.	19-Sep-02	- Literature review - Interviewed Wawan Ridwan (PM WWF Nunukan) - Interviewed Fitrian (WWF-NRM Program Coordinator)
3.	20-Sep-02	- Interviewed Agus Purnomo (WWF Jakarta, Director) - Interviewed Agus S (Deputy Director Forest Program WWF Indonesia) - Interviewed DFID Jakarta - Interviewed Emil Tarigan (WWF Jakarta, Internal Services Manager)
4.	21-Sep-02	Literature review
5.	22-Sep-02	- Traveled to Sorong - WWF Sorong Presentation
6.	23-Sep-02	Meetings in Sorong: - Benja (Sahul Bioregion Director, WWF Jayapura) - BKSDA - Dinas Kehutanan - Representatives of local community (LMA) - WWF Sorong Staff+D20
7.	24-Sep-02	Meetings in Sorong: - Bappeda Kabupaten Sorong - Dinas Tata Ruang Kabupaten Sorong - Local NGO YAPALVO - WWF Sorong Staff
8.	25-Sep-02	Meetings in Sorong: - Setda Kab Sorong - Dinas Lingkungan Kab Sorong - LMA Malamoi - Conference call to Jayapura (Rudy, WWF Sahul Bioregion)

	Date	Activities
9.	26-Sep-02	<ul style="list-style-type: none"> Meetings in Sorong: - DPRD Kab Sorong - Conference call to John M (ex JM PM, Sahul Bioregion) Jayapura - LMA Malamoi - Conference call to Jayapura (WWF Sahul Bioregion) - Conference call to Roy Rindo-Rindo (WWF Sahul Bioregion, Media) - Interviewed Camat Sausapor - Debriefing WWF Sorong staff
	27-Sep-02	Traveled to Bali
10.	28-Sep-02	Arrange appointments for interviews in Bali
11.	29-Sep-02	<ul style="list-style-type: none"> - Arranged tickets for Nunukan - Interviewed Tonny Suhartono (WWF Kalimantan Director)
12.	30-Sep-02	<ul style="list-style-type: none"> - Travelled to Balikpapan (overnight in Balikpapan) - Meeting with WWF Balikpapan staff (and Adi, ex Nunukan Program)
13.	01-Oct-02	<ul style="list-style-type: none"> - Meeting with Adi (continued) - Travelled to Nunukan - Meeting with Ketua DPRD Kab Nunukan
14.	02-Oct-02	<ul style="list-style-type: none"> Meetings with: - NRM staff at Sekda Kabupaten Nunukan - Kantor Perhutani - Member of Kunyit village (Roben) - WWF Nunukan Presentation
15.	03-Oct-02	<ul style="list-style-type: none"> Meetings at/with: - Ketua BPN Kabupaten Nunukan - WWF Staff - Karnain, Village Head, Sekikilan village, Sungai Tulid - Sain, Autonomy Center (Local NGO)
16.	04-Oct-02	<ul style="list-style-type: none"> - Travelled to Kekayap village, Sungai Seuku - Meeting with Pangeran Ismail, Local leader
17.	05-Oct-02	Travelled to Jakarta

	Date	Activities
18.	07-Oct-02	<ul style="list-style-type: none"> - Literature review - Meeting with Miriam van Heist (NRM EPIQ) - Data gathering (from Nunukan and Sorong offices)
19.	08-Oct-02	<ul style="list-style-type: none"> - Meetings with - Dewi Suralaga (National Program Director, WWF Indonesia) - Budi Situmorang (Dirjen Tata Ruang, Kimpraswil) - Preparation for presentation to WWF
20.	09-Oct-02	<ul style="list-style-type: none"> - Field Findings Presentation to WWF Indonesia - Financial and HRD data collection from WWF
21.	10-Oct-02	<ul style="list-style-type: none"> - NRM - USAID Presentation - Literature review and analysis
22.	11-Oct-02	Analysis and report writing
23.	12-Oct-02	Analysis and report writing
24.	14-Oct-02	Analysis and report writing
25.	15-Oct-02	Analysis and report writing
26.	16-Oct-02	Draft Report submission

Annex IV: Achievements against workplans - Sorong and Nunukan

YEAR I – SORONG

No.	Activity	Achievement	Output	Comments
Obj 1	Identify high priority BD resources, describe how specific human activities adversely impact these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented			
1.1	<i>Review study reports and documents that relate to Irian Jaya's protected area system, and conduct field studies to identify poorly represented ecosystem types and remaining unprotected natural ecosystems</i>	100%	Report of review of data from CI & Petocz Threat analysis in NRM database	
1.2	<i>Collect spatial data on physical, biological and socio-economic attributes of Irian Jaya and begin development of initial layers of a bioregional planning GIS</i>			
1.2.1	Workshop to collect secondary data on biodiversity & regional planning.	100%	Workshop held 21-23 March. Preliminary recommendations	
1.2.2	Collect regional development maps	100%	Prov. & district maps collected	see SAR Nov99-Jun00 & Jul-Oct00 for list
1.2.3	Collect tabular data	100%	Stats of Irja Forestry Dept 99, 'IrJa in numbers 99', NR stats Sorong 97/8	Info in NRM database
1.2.4	Collect secondary biological data	100%	Flora & fauna dbase, data on protected spp. at provincial scale	see SAR Nov99-Jun00 & Jul-Oct00
1.2.5	Collect maps, digital satellite images and digital files such as GIS coverage files, satellite raw data, GPS data files	100%	Range of data collected & classified for GIS entry	see SAR Nov99-Jun00 for list. Due to lack of existing up-to-date data, plan to buy DITTOP digital maps & Landsat images

No.	Activity	Achievement	Output	Comments
1.3	<i>Explore methodologies and conduct rapid biological assessment (RBA) in areas with potentially high biodiversity that are candidates for new or strengthened protection through changes in forest-use status.</i>			
1.3.1	Select priority area for survey, develop survey team and choose method/equipments	40%	Priority area (JMTU) selected on basis of results of BD survey planning workshop Aug 00 co-funded by WWF-NL. Survey postponed awaiting more favourable weather	Birds Head selected as priority for WWF Sahul 2001-2002
1.3.2	Conduct Rapid Biological Survey (RBS) in two locations to be determined during workshop (1.2.1)	40%	JM already surveyed as part of turtle prog. Jun99	Other areas dep. on results of Aug workshop
1.3.3	Report writing & dissemination of Rapid Biological Survey (RBS)	30%	Report on JM available. Other areas to be chosen on basis of results of Aug workshop	
1.4	<i>Analyse information from activities 1.1-1.3 to identify ecosystems and critical species habitats that are under-represented in the current protect area system (PAS), propose new protected areas (PA) or other facilitated allocation of land in other land use categories that meet biodiversity conservation requirements</i>			
1.4.1	Coding, visualization and rendering image of all data from activity 1.1-1.3	40%	Compiled data coded but still awaiting more up-to-date data from more recent satellite images	
1.4.2	Scenarios of priority areas and new land use plan			Dependent on 1.4.1
1.5	<i>Recommend changes to the current protected area system, and recommend ways to maintain or improve the biodiversity value of important sites outside the system</i>			

No.	Activity	Achievement	Output	Comments
1.5.1	Workshop on Jamursba Medi (JM) protected area in Sorong District	100%	Workshop led to recommendation for proposed NP to include JM, TU & area of HPT & HL between.	40 participants from community, Sorong govt, Bapedalda, Forestry, NGOs
1.5.2	Boundary survey, mapping and propose legal status from the Ministry of Forestry and Estate Crops for JM as a protected area	80%	Boundary survey of JM & TM by provincial Forestry office. Map of proposed NP boundary created by WWF/NRM	Rec letters - Bupati May00, Gov. Jun00
1.5.3	Develop biodiversity strategy for conservation plan in Sorong	30%	Initial analysis started based on information compiled so far	
1.6	<i>Identify biological and physical indicators of biodiversity in landscape units</i>			
1.6.1	Review former research to identify biophysical indicators	100%	Compiled data from taxa specialists for birds, mammals, fish	
1.6.2	Ground-truthing surveys on specific location in Sorong			Dependent on activities in 1.4
1.6.3	Data plotting and development of models to support RBA	50%	Secondary data plotting completed	Primary data dependent on 1.4
1.7	<i>Develop typology of threats according to the type of agent, and physical, social, legal, and economic factors underlying specific threats. Ranking of threats according to its severity, magnitude and frequency</i>			
1.7.1	Develop typology of threats according to type of agent and actions to counter such threats			
1.7.2	Analyze, categorize and rank of threats			
1.8	<i>Identification and description of biological and physical impacts on specific ecosystem types from major threat types</i>			
1.8.1	Determine level of threats in specific ecosystem		Rescheduled to 2nd year & will focus on Proposed PA	

No.	Activity	Achievement	Output	Comments
1.8.2	Projecting trends of threat-intensities and related biodiversity decline.		ditto	
1.9	<i>Mapping distribution of threats in relation to important biodiversity values</i>		ditto	
1.9.1	Matching and visualisation of threats		ditto	
1.9.2	Media of information sharing towards stakeholders & partners	100%	Discussions held with Sorong govt, Biphut & local communities	
1.9.3	Develop threat analysis methods to be used at the protected area level (as opposed to the kabupaten or bioregion)		Rescheduled to 2nd year	
Obj 2	Establish biodiversity conservation as an important planning and decision-making criteria by developing and testing concepts and techniques, recommending changes to the institutional and legal framework, and educating Gov. officials and the private sector			
2.1	<i>Review relevant sections of GOI & provincial govt. of Irian Jaya institutional & legal framework to identify key points of influence for bio-regional planning, such as regional (provincial) spatial planning, budgeting process, investment and land use permit processes for private sector financed development, environmental impact assessment process and other laws & regulations</i>	20%	Review of Sorong district govt plan 2001 & Act No.22/99 & Reg. 52/2000. Not done at provincial level	Effects of process of decentralisation not yet clear as process has only just begun. Special Autonomy Status just a rumour at this stage

No.	Activity	Achievement	Output	Comments
2.2	<i>Identify key counterparts in govt and develop close relationships with them. Influence decisions at key points in the planning process in ways that support biodiversity conservation. Work with NGOs, NRM partners and relevant donor funded projects to leverage influence. Lobby at the national level for modification of centrally planned activities that will adversely affect biodiversity.</i>	90%	Positive relationships established with BAPPEDA Tk I, Bapedalda Tk I, Forestry Depts, BKSDA I/II, National Land Agency Tk I and NGOs in Jayapura & Sorong	
2.3	<i>Review existing developmental plans established in Irija and Sorong districts including the REPELITA, RTRWP (Prov. Spatial Plan) Irija, RTRWK (District Spatial Plan) Sorong, sectoral plans and plans for major private sector projects</i>	75%	Review conducted, some preliminary conclusions derived. Report to be completed in next workplan period	see SAR Nov99-Jun00
Obj 3	Strengthen protected area management within priority bioregions through participatory project planning and facilitation of stakeholder agreements, and test innovative institutional and funding arrangements for PAs management in Irian Jaya			
3.1	<i>Facilitate community participation in the planning of protected area management and buffer zone development. Provide small grants to NGOs for participatory mapping, land use planning and buffer zone development initiatives</i>	100%	3 field trips to advocate for sust. NRM with comms. Institutional strengthening of LMAs - facilitation of work plan production. Facilitation of alternative income generation activities in Warmandi & Saubeba in context of ICDP	All planned activities completed; on-going process throughout project period

No.	Activity	Achievement	Output	Comments
3.2	<i>Develop specific agreements for sustainable management of natural resources at a bioregional scale</i>	50%	On-going discussions with stakeholders re: status of proposed PA	Issue of some communities rejecting NP status
3.3	<i>Identify and facilitate innovative funding mechanisms (Irian Jaya's Biodiversity Trust Fund & Protected area project)</i>			
3.3.1	Work collaboratively with CI to facilitate Irian Jaya's Biodiversity Trust Fund	100%	2 meetings in Jayapura in 99. Director of WWF Sahul elected as chairman of Board of BTF. Meetings in June, Oct & Dec00. Decision to launch project in Feb01 in JKT	Decision to separate PTF project from WWF/NRM project & fund from other sources
3.3.2	Promote conservation incentive for community in and adjacent to protected area from Protected Area Project sources		Responsibility for Protected Area Project moved from Bapedalda to Dinas Kehutanan. Project subsequently discontinued.	
3.3.3	Develop community agreement of proposed JM protected area	80%	Letter from community Sept 99 expressing willingness to manage area as a conservation area. Agreements from stakeholders at Dec 99 workshop. Socialisation of workshop results to villages. Some elements of Kwoor community disagree	
Obj 4	Develop the capacities of stakeholders in protected area management and bioregional planning through training workshops and cross-visits			
4.1	<u>Prepare training modules for ICDPs and bioregional planning</u>		scheduled for year 3	
4.2	<u>Provide training to stakeholders in ICDP design and implementation and bioregional planning</u>		scheduled for year 3	

YEAR II - Sorong

	Activity	Achievement	Output	Comments
Obj 1	Identify high priority BD resources, describe how specific human activities adversely impact these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented			
1.1	<i>Collect spatial data on Irian Jaya biophysics & socioeconomic features & commence development of initial layers of a bioregional planning GIS</i>	100%		
1.1.1	Collect digital maps (30sheets) & digital satellite image (12 scenes) covering Sorong & Manokwari	100%	1:100,000 topo maps for Sorong & Manokwari.	
1.1.2	Develop and/or analyze digital maps obtained from satellite imagery (Landsat TM MSS 7 Band) to produce thematic maps (topography, vegetation, land use etc).	100%	Satellite images analysed, maps produced	
1.2	<i>Search for appropriate methodology and conducting rapid biological assessment (RBA) for potentially high Biodiversity areas being candidates to acquire the status of nature preservation area.</i>			
1.2.1	Select potentially high biodiversity area, choose method/equipments and set up a survey team	100%	JMTU selected as priority in Aug 00 workshop. Survey team selected from LIPI, UNCEN, UNIPA & Birdlife Int NGO. Survey plan completed	
1.2.2	Conduct Rapid Biological Assessment (RBA) on two locations in Sorong (locations will be determined)	50%	Conducted in Saukorem, Manokwari Jun-Aug01	Community rejects activities in Wewe Kwoor

	Activity	Achievement	Output	Comments
1.2.3	Final report and dissemination of Rapid Biological Assessment (RBA) of Sorong KSDA. Survey results shall be presented before a seminar	75%	Report on insects completed, data on amphibians, reptiles, mammals in dbase	Veg & bird data - final report not yet received from LIPI/BPK
1.3	<i>Analyze information collected during Acts. 1-3 in order to identify ecosystems & critical species habitats under-represented in the current protected area system, and based on that propose new PAs or other facilitated allocation of land</i>			
1.3.1	Coding, visualization and rendering image of all data, identify ecosystems and critical species habitats that are under-represented	80%	Veg data from satellite images. This & other data analysed with stakeholders in workshop on 'Ecoregion & landscape planning' May 2001	Further analysis dependent on 1.2.3
1.3.2	Field survey to re-examine specific location in Sorong	50%	In Manokwari only	Dependent on 1.2.3
1.3.3	General recommendation concerning biodiversity status and conditions on ecosystem found within the protected areas	100%	Based on available RBA data from JM & Saukorem, identified BD status of JMTU	see SAR May-Oct01 App. For more details
1.4	<i>Recommend changes to the current protected area system, and recommend ways to maintain or improve the biodiversity value of important sites outside protected area</i>			
1.4.1	Recommend changes to the Protected Area System in Sorong	100%	Continued socialisation of JMTU as conservation area with stakeholders. Bupati suspended licence of HPH in proposed area. DG PKA issued plan to map proposed area	

	Activity	Achievement	Output	Comments
1.4.2	Recommend ways to maintain or improve the biodiversity value of important sites outside the protected area system (Sorong)	100%	General recommendations based on results of village surveys in Amberbakem & Saukorem, Manokwari	see SAR May-Oct01 App. For more details
1.5	<i>Identify biological and physical indicators of biodiversity in landscape units</i>			
1.5.1	Review earlier research report with the purpose of identifying biophysical indicators in Landscape unit	100%	Indicators from analysis of Petocz & CI report and RBA's already carried out	
1.5.2	Data plotting and development of models to support RBA	80%	Already have a lot of data but not yet complete enough to determine models	Dependent on results from RBA surveys - final report not yet received
1.6	<i>Develop typology of threats according to the type of agent, and physical, social, legal, and economic factors underlying specific threats. Ranking of threats according to its severity, magnitude and frequency</i>			
1.6.1	Develop typology of threats according to type of agent and actions to counter such threats	100%	Report 'Analysis of threats to proposed NP JMTU'	see SAR Nov00-Apr01 App.3
1.6.2	Analyze, categorize and rank of threats	100%	ditto	ditto
1.7	<i>Identification and description of biological and physical impacts on specific ecosystems</i>			
1.7.1	Determine level of threats in specific ecosystem	100%	Level of threats to forest & coastal ecosystems identified	see 1.6.1 above & SAR Nov00-Apr01 & May-Oct01
1.7.2	Projecting trends of threat-intensities and related biodiversity decline.	100%	ditto	ditto
1.8	<i>Mapping distribution of threats in relation to important biodiversity values</i>			
1.8.1	Define important biodiversity values	100%	Values determined	see SAR Nov00-Apr01 & May-Oct01
1.8.2	Mapping distribution of threats in relation to important biodiversity values	100%	Map of threats to proposed NP	

	Activity	Achievement	Output	Comments
1.9	<i>Develop threat analysis methods to be used at the protected area level (as opposed to the kabupaten or bioregion)</i>	50%	Stakeholder workshops planned for Manokwari Mar02 & Sorong May 02 not carried out due to focus on other targets in final year	
1.10	<i>Develop method to mitigate specific threats. Identify requirements for improving legal framework or capacity building of enforcement agencies</i>	50%	BKSDA & local NGO developed methods for JM	Not yet completed for TU
1.11	<i>Design and implement strategy for mitigating and countering threats to biodiversity in target location</i>	50%	as for 1.9 & 1.10. Discussions on sust. NRM & alternative income gen. with comms during field trips	see Report on field visits to Waibem, Wau, Wormon & Kwoor
1.12	<i>Review the implementation of methods and design of threat analysis at the PA level</i>	.	Not carried out due to change in focus in final year	
Obj 2	Establish biodiversity conservation as an important planning and decision-making criteria by developing and testing concepts and techniques, recommending changes to the institutional and legal framework, and educating Gov. officials and the private sector			
2.1	<i>Finalize the report regarding the framework of Bioregional planning in Sorong District</i>	100%	Report "Analysis of institutional framework of local govt & local NGOs within regards to NR and ecosystem conservation development in Sorong District". Report "Development Planning Process in Sorong District"	See Appendices 3&4 SAR May-Oct01

	Activity	Achievement	Output	Comments
2.2	<i>Developing a viable network with stakeholders to improve biodiversity conservation planning process</i>	100%	NGO/LMA network established - involved in field survey to JM & Kwoor. Research in Manokwari district involved BPK, LIPI, UNIPA. Lobbying of local govt - results included Bupati's suspension of HPH licence, letter from MOFOR to WWF confirming that change of status of JMTU in process	
2.3	<i>Review existing developmental plans established in Iruja and Sorong districts including the REPELITA, RTRWP (Prov. Spatial Plan) Iruja, RTRWK (District Spatial Plan) Sorong, Paduserasi (Forest Landuse Map)</i>	100%	Review of RTRWK Sorong in Report "Development & Conservation in Sorong area"	See Appendix 4 SAR May-Oct01. Review of existing plans but RTRWK is currently being updated (with input from WWF)
2.4	<i>Make agreements between main stakeholders, i.e. concerning the GIS and biodiversity database GIS Network</i>	50%	Discussions with Forestry & Bapedalda at provincial level. GIS training carried out at the provincial level	Changes in govt structure due to decentralisation means GIS responsibility not yet clear. No facilities at district level
2.5	<i>Develop, in cooperation with stakeholders in the District of Sorong, alternative spatial plans incorporating biodiversity conservation</i>	50%	WWF provided recommendation and spatial & tabular data to consultants compiling spatial plan	RTRWK still in process at this stage. Need more socio-economic & biodiversity data as basis
Obj 3	Strengthen protected area management within priority bioregions through participatory project planning and facilitation of stakeholder agreements, and test innovative institutional and funding arrangements for PAs management in Irian Jaya			

	Activity	Achievement	Output	Comments
3.1	<i>Facilitate community participation at the planning stage of the establishment of Jamursba Medi Tamrau as National Park as well as development of its buffer zone</i>			
3.1.1	Appoint & train team & NGO partners for PRA	100%	Survey method designed & team compiled. Training modules produced, training conducted Mar01 in Manokwari for 40 people including local govt	
3.1.2	Conduct PRA & demographic survey at village level	50%	PRA in Manokwari April 27-June 10.	Delayed in Sausapor, Sorong District due to rejection by local comm.
3.1.3	Analyse PRA for economic alternatives & local institutional strengthening	100%	Analysis done on available data. Further ideas for economic activities.	
3.1.4	Assist stakeholders to develop small scale NRM model in selected villages adjacent to proposed NP	75%	Advice given on improving agric production. Kiosk management training for villages in Sorong with local office of Dept of Co-ops.	
3.2	<i>Identify innovative funding mechanisms for NRM model e.g. government budget, corporate sector and international agencies</i>	50%	Socialisation of results of sosec surveys to relevant govt agencies. Govt appreciate of data but lack funds for CD	
3.3	<i>Establish site-specific stakeholders agreements (e.g. Partnership between private parties and park management) with regard to the sustainable management of natural resources (third year)</i>			

	Activity	Achievement	Output	Comments
Obj 4	Develop the capacities of stakeholders in protected area management and bioregional planning through training workshops and cross-visits			
4.1	<i>Prepare training modules for ICDPs and bioregional planning (third year)</i>			
4.2	<i>Provide training to stakeholders in ICDP design and implementation (third year)</i>			
4.3	<i>Supervise Stakeholders in implenting the bioregion approach and ICDP (third year)</i>			
4.4	<i>Documentary of Leatherback turtle and its habitat in Jamursba Medi Tamrau</i>		Postponed due to change in SCTV schedule	
4.5	<i>Conduct cross visit to turtle projects (location will be determined)</i>	100%	Visit to Kakadu by member of DPRD II, head of LMA, NGO director & local comm member from Sausapor. Awareness raised of traditional owners role in NP management & eco-tourism dev.	See comments from participants in SAR May01-Oct01

Year III - Sorong

		Achievement	Output	Comments
Target 1:	Support from the local government and community is obtained for conservation of Jamursba Medi - North Tamrau by October 2002			
Milestone 1:	<i>The formulation of Jamursba Medi - North Tamrau as conservation area is followed up by the district government by October 2002</i>			
1.1.	Lobby district governments of Sorong and Manokwari to stop continuing HPH operation and to gain their commitments not to issue Kopermas in the proposed conservation area	100%	Bupati has suspended licence of PT Multi Wahana Wijaya indefinitely	Recent report in national papers that MOFOR have permanently revoked this HPH
1.2.	Lobby and facilitate local government (district and sub-district) to conduct collaborative survey on socioeconomic, alternative income generation, ecotourism potential, tenurial in Sausapor and several areas in Kebar and Amberbaken	100%	Meeting with local govt in March 02 produced strong endorsement from govt. for WWF's activities & agreement to carry out joint surveys. BAPPEDA to seek funding for improved transport (ship) to improve comms access to markets. BKSDA agreed to prioritise funding for JMTU.	see activities under Target 2 for details of surveys+E9
1.3.	Facilitate meeting and logistic of partners (head of Sorong district, head of sub-district, BKSDA, government forestry agency of Sorong and local parliament) visiting the villages in Sorong and Manokwari districts	100%	Public consultation meeting Feb 2002 & meetings leading up to it involved both local and national government as well as reps from all communities concerned	See App 3 SAR Nov01-Apr02
Milestone 2:	<i>The agreement from community to support conservation in this area is increased by June 2002</i>			

		Achievement	Output	Comments
1.4.	Carry out socialization about the visit of verification team of Forestry department to the communities (Sausapor, Amberbaken, Kebar)	100%	Meetings with local community representatives from Sausapor, Amberbaken & Kebar 12-24 Feb02. Media campaign	See App 2 SAR Nov01-Apr02
1.5.	Organize meeting of community to meet the verification team Karon (Amber Baken, Kebar, Sausapor coastal dan remote areas)	100%	WWF provided the logistics for community reps to attend public consultation mtg	
1.6.	Organize public participation workshop to find the best solution for the management of conservation area in JMNT	100%	Public consultation meeting Feb 2002	See App 3 SAR Nov01-Apr02
1.7.	Follow up and socialize the results of verification team in Sorong and Manokwari	75% if didn't include Manokwari	Socialisation to villages carried out as part of sosec, tenurial & eco-tourism potential surveys Apr02	
Mile-stone 3:	<i>Support from media for the establishment of conservation area of Jamursba Medi North Tamrau is obtained by September 2002</i>			
1.8.	Conduct campaign in Sorong town and villages using Bahasa Indonesia and local language on the importance of protection of Jamursba Medi beach	100%	Dialogue between local comms (pro-contra), BKSDA & DPRD II reps aired on RRI 23-24 Feb. Report on discussion produced. Articles also appeared in local paper 22-23 Feb.	
1.9.	Make a documentary about leatherback turtles in Jamursba Medi (TVRI and SCTV)	100%	SCTV crew filmed local community traditions & turtle egg-laying in JM. Series of national broadcasts on Sat lunchtime in Sept 02 raised awareness of importance of conserving turtles.	
Target 2	All data and information, including social and economic valuation and GIS maps required to develop the Conservation Area proposal of Jamursba Medi - North Tamrau (JMNT) are completed by July 2002.			

		Achievement	Output	Comments
Mile-stone I:	<i>Socio-economic and biodiversity information and mapping are completed by July 2002.</i>			
2.1.	Conduct socio-economic survey together with district government team in Sausapor sub-district.	100%	Surveys carried out in April in villages in Sausapor sub-district (Tamrau Utara area) & coastal comms (JM). Socialisation of results of consultation meeting & proposal for PA status also carried out at same time. Survey team included reps from UNIPA, local govt, BKSDA, NGO & community members.	See Report in App 9A, 9B & 9C SAR Nov01-Apr02
2.2.	Conduct tenurial study and Update GIS data of Sausapor, Amberken, and Kebar through the implementation of participatory mapping in Kebar and Sausapor	75%	Carried out at same time as above. Understanding of tenure still only general. Has been too sensitive an issue to explore in more depth	
2.3.	Monitor and record numbers of turtles coming to nesting site in Jamursba Medi	100%	Monitoring carried out during nesting season	See Report on Population Monitoring of Leatherback Turtles in IM beaches App. 6 SAR Nov01-Apr02
2.4.	Study of potential ecotourism in Jamursba Medi & North Tamrau.	75%	Carried out at same time as 2.1 above. Info is at the district level - info from local communities not yet detailed enough	See Report in App 9A, 9B & 9C SAR Nov01-Apr02

		Achievement	Output	Comments
2.5.	Complete report of Rapid Biodiversity Assessment (RBA) and semiannual report I (period Nov 2001 - April 2002)	75%	Semi-Annual Report completed. Problems with changes of staff within LIPI mean that RBA final report not yet received although data from other researchers is already available	
Target 3	The proposal of JMNT as conservation areas is integrated into spatial plan of Sorong district, will be accepted by relevant stakeholders (provincial and district governments, local communities and relevant agencies) and will be agreed by the central government (the Ministry of Forestry) by October 2002			
Milestone 1 :	Conservation of NRM is integrated in district and provincial spatial plan by September 2002.			
3.1.	Lobby the governments and local parliaments to incorporate conservation of NRM to the spatial planning.	50%	Lobbying of DPRD II, Spatial Planning Office & SP consultants carried out. Most of the proposed PA integrated into the draft Spatial Plan (SP)	SP draft completed by consultants but not yet formally presented, discussed, ratified by DPRD.
3.2.	Lobby the local governments for strategic development of Jamursba Medi-NorthTamrau and Amberbaken and Kebar.(Village level)	50%	Lobbying of sub-district govts carried out. Agreement for sub-district govt to be involved in socialisation and surveys in villages. Presentation of results of village surveys to DPRD June 02 resulted in commitment to help improve access to markets	Management plans not yet possible as legal status of the proposed area not yet ratified

		Achievement	Output	Comments
3.3.	Lobby district governments to consider integrating village development into the development plans of Sorong and Manokwari districts (District level)	50%	Lobbying of DPRD II, Spatial Planning Office, BAPPEDA & SP consultants carried out	SP draft completed by consultants but not yet formally presented, discussed, ratified by DPRD.
Mile-stone 2:	<i>Participatory community based biodiversity management is designed by October 2002.</i>			
3.4.	Strengthen income generation activities (<i>rumput kebar, araukarya, keladi</i> , coconut oil, peanut, community cooperative) in villages around Jamursba Medi and North Tamrau.	80%	In JM villages small business groups formed based on production & processing of agric & meat products. Kiosk management training Apr 02. Positive reaction from communities	Report on training in App 7 SAR Nov01-Apr02.
3.5.	Conduct stakeholders (local governments, NGOs, communities, universities) workshop on proposed Jamursba Medi & North Tamrau Strategic Plan (in District) - on August 2002	40%	Workshop was intended to result in strengthened network but so far have concentrated on more informal discussions due to that fact that structure of key community reps (LMAs) still in state of flux	
Target 4	Strengthening the capacity building of local NGOs, communities and other stakeholders is implemented by September 2002.			
Mile-stone 1:	<i>Human resource of stakeholders for Natural diversity is strengthened by August 2002.</i>			
4.1.	Conduct meeting with stakeholders (Local NGOs, District government, community from Jamursba medi) on natural resource management.	75%	Meetings held. Support forthcoming from most communities & local govt but some coastal comms still not completely supportive	

		Achievement	Output	Comments
4.2.	Train NGOs and local governments for participatory mapping and inventory of Natural Resource Management (NRM), in Manokwari	100%	Participatory mapping guidelines produced. Training conducted in Manokwari	See App. 8 SAR Nov01-Apr02 for guidelines.
4.3.	Facilitate NGOs and communities networking organizations at district level (May 2002)	50%	Facilitated discussions on establishment of traditional council "Dewan Adat" to represent communities. Network meeting May 02	Still need to work on strengthening networking. NGOs still weak, LMA structure in state of flux
4.4.	Conduct village turtle workshop (Sept 2002) - Saubeba	0%	Unable to carry out due to non-conducive attitude of some comms	Unable to carry out due to non-conducive attitude of some comms
4.5.	Conduct villages socialization and consultation (village level)	75%	See 2.1, 2.2, 2.4. Inland communities supportive of WWF programme but some coastal communities still unsupportive	Still need to work on awareness raising of some coastal communities

YEAR I – NUNUKAN

	Activity	Achievement	Output	Comments
1	Identify high priority biodiversity resources, describe how specific human activities adversely affect impact these resources, identify lower impact alternatives, and increase the area of protected resources where best practices are being implemented			
1.1	Review literature on Kalimantan's protected area system and related field studies to identify poorly represented ecosystem types and remaining unprotected natural ecosystems	100%	Report listing ranking of priority areas for conservation and appropriate use	
1.2	Collect spatial data on physical, biological, and socio-economic attributes of Kalimantan, and begin development of the initial layers of a bioregional planning GIS	100%	<ul style="list-style-type: none"> • GIS database structure and set up • Digitized maps • Data overlays and combinations 	
1.3	Explore methodologies and conduct rapid biological assessments in areas with potentially high biodiversity that are candidates for new or strengthened protection by changes in forest-use status	100%	Survey report, outlining: <ul style="list-style-type: none"> • Methodology of survey adopted • Field surveys data • Priority ranking of selected areas refined • Updated GIS database and catalog 	Survey was carried out as planned. Results are in the report submitted, with the conclusion that further study would be needed in the future. Data is shared with WWF Sahul Bioregion
1.4	Analyze information from Activities 1-3 to identify ecosystems and critical species habitats that are under-represented in the current protected area system, propose new protected areas or other facilitated allocation of land in other use categories that meet biodiversity conservation requirements	100%	<ul style="list-style-type: none"> • GIS supported Ranking of Priorities and Biodiversity values of areas and landscapes • Visualization and quantification • GIS supported Biodiversity scenarios 	The GIS team that incorporated findings from previous field surveys produced corrected and updated land suitability map.

	Activity	Achievement	Output	Comments
1.5	Recommend changes to the protected area system, and recommend ways to maintain or improve biodiversity value of important sites outside the system			
1.5.1	Communication of Protection Priorities to stakeholders and partners, through cross-visits and seminars, scope Kalimantan	100%	<ul style="list-style-type: none"> Stakeholder and partner feedback on Protection Priorities, Scenarios and Trends integrated; Prioritization 	Evidence: handouts produced, list of participants in the presentation meeting
1.5.2	Preparation of Protected Area proposals and Biodiversity conservation plans, submitted to East Kalimantan authorities	100%	Protected area proposals in appropriate format	
1.6	Identify biological and physical indicators of biodiversity in terrestrial landscape units	100%	Analysis report, outlining: <ul style="list-style-type: none"> Matrix of criteria and indicators on threats to biodiversity GIS data model to support biodiversity assessment 	
1.7	Develop a typology of threats according to the type of agent, the physical, social, legal, and economic factors that underlie the threat, and obstacles to countering the threat. Rank threats according to severity, magnitude and frequency	100%	Report outlining: <ul style="list-style-type: none"> Threats to biodiversity, analyzed, categorized, ranked Ground trusting surveys Regional and sectoral studies 	
1.8	Identify and describe biological and physical impacts on specific ecosystem types from major threat types			
1.8.1	Scope East Kalimantan, Central Kalimantan	100%	Sets of data on <ul style="list-style-type: none"> GIS supported analysis and ranking of Biodiversity impact of threats Trend projection 	See also the report on the Swamp Forest Study

	Activity	Achievement	Output	Comments
1.9	Map the distribution of threats in relation to important biodiversity values			
1.9.1	Scope East Kalimantan, Central Kalimantan	100%	Report outlining: <ul style="list-style-type: none"> • GS supported visualization of threat distribution and trends • Field surveys • Presentation and feedback from stakeholders 	Digital maps available from the GIS include the forest concessions, oil palm establishment or claims, roads, population centers, vegetation types, degraded forests, etc.
1.10	(2nd yr) Develop methods for threat analysis for use at the protected area level (as opposed to the province or bioregion)			
1.11	(2nd year) Develop and test approaches for mitigating specific threats. Identify requirements for improving the legal framework or strengthening enforcement capability		Expected effectiveness	Planned to take place in the second year
1.12	(2nd yr) Design and implement a strategy for mitigating and countering biodiversity threats in target provinces		Action Plan	Planned to take place in the second year
1.13	Document how threat scenarios evolve as the, intensity, and type of development changes, using present conditions in Kalimantan to illustrate three stages of threat intensity		Set of what-if scenarios for biodiversity conservation measure against existing and anticipated threats and opportunities (GIS)	This activity will be covered by the what-if scenarios for the Nunukan district to be developed in the coming period.
2	Establish biodiversity conservation as an important planning and decision-making criteria by developing and tested concepts and techniques, recommending changes to the institutional and legal framework, and educating government officials, and the private sector	100%	Swamp forest study on Sebuku Delta	The results presented to the broad audience of stakeholders, has already lead to a member of the District Parliament requesting the District Government to not give out any (more) licenses for oil palm development in the area

	Activity	Achievement	Output	Comments
2.1	Review relevant sections of the GOI institutional and legal framework to identify key points of influence for bio-regional planning, such as regional and spatial planning, the budgeting process, the investment and land use permitting processes for private sector financed development, the environmental impact assessment process, and other laws and regulations	100%	Report on the legal and institutional framework of regional planning	
2.2	Identify key counterparts in government, and develop working relationships with them. Influence decisions at key points in the planning process in ways that support biodiversity conservation. Work with NGOs, NRM partners, and relevant donor funded projects to leverage influence. Lobby at the national level for modification of centrally planned activities that will adversely affect biodiversity	100%	A series of activities such as: <ul style="list-style-type: none"> • Identification of key counterparts in government • Work with relevant partners to leverage influence • Lobbying at national level 	
2.2.1	Scope East Kalimantan	100%	Stakeholder and partner networks and groups established	This activity also refers to the MoU, the partnership between WWF and the District, and the role WWF is playing in coordinating input and support from other organizations and donors to the Nunukan concept.
2.2.2	Scope Central Kalimantan		Stakeholder and partner networks and groups established	This activity is not carried out in Central Kalimantan, instead, full focus is given in East Kalimantan only.
2.4	Development of the alternative plans			

	Activity	Achievement	Output	Comments
2.3	Review existing plans in the target provinces and districts including the REPELITA, spatial plans, sectoral plans, and plans for major private sector projects			
2.3.1	Scope East Kalimantan		<ul style="list-style-type: none"> • Detection of Biodiversity threats and opportunities • Compared to the what-if biodiversity and threat scenarios 	<p>The Nunukan District was still at the beginning of making its own development and spatial plan and WWF and its partners worked toward providing input for Bappeda and relevant agencies.</p> <p>Appendices and Reports were submitted for this particular activity</p>
2.4.1	Development of the alternative plans, scope East Kalimantan		Regional Development and Biodiversity scenarios developed	This activity refers to the biodiversity scenarios to be developed next, and which will be part of the what-if scenarios to be developed in the coming period
2.4.2	Alternative plans promoted to be endorsed by the East Kalimantan government levels		Government decision making levels adopt alternative plans	
3	Strengthen protected area management within priority bioregions through participatory project planning and facilitation of stakeholder agreements, and test innovative institutional and funding arrangements for protected area management in Kalimantan			
3.1	(2nd yr) Documenting lessons learned by WWF in the course of implementing protected area projects in Indonesia. Using these lessons, and the findings of recent assessments of the Integrated Conservation and Development approach, recommend ways that the concept and approaches currently used in the design of protected area conservation projects should be revised in the form of a manual	100%	<ul style="list-style-type: none"> • Updated ICDP Manuals • Experiences and know-how of the scenario building and biodiversity and threat assessments made available to stakeholders 	Data (GIS, reports, etc) were summarized into information materials such as the Concept Brief in Bahasa Indonesia, the Project Brief in English, handouts of presentations in Bahasa Indonesia. Furthermore, most data and maps are being shared with the Nunukan Government agencies.

	Activity	Achievement	Output	Comments
3.2	Facilitate community participation in the planning of protected area management and buffer zone development (e.g. multi-purpose conservation areas, special forest management areas, protected landscapes, conservation stewardship agreements). Provide small grants to NGOs for participatory mapping, land use planning, and buffer zone development initiatives	100%	Input for alternative planning and management system developed and promoted	<ul style="list-style-type: none"> The rapid socio-economic appraisal and introductory surveys in the Sebuk and Sembakung areas yielded the first information on the communities. A community development strategy developed, focusing on the role of communities in conservation or forest resources management and on the compatibility of their land and resource utilization activities with the conservation function.
3.3	Identify and facilitate innovative funding mechanisms (e.g. Inpress Kawasan Lindung, Friends of Kutai)			
3.3.1	Scope East Kalimantan		<ul style="list-style-type: none"> Network of private sector partners, organizations and institutions Communication, M&E system developed 	
3.4	(2nd yr) Develop site-specific stakeholder agreements (including private sector park partnerships) for the sustainable management of natural resources at a bioregional scale	75%	<ul style="list-style-type: none"> MOUs Conservations stewardship agreements Park partnerships 	<p>This is rather difficult to put into percentage due to:</p> <ul style="list-style-type: none"> Local Government offices were not used to signing MOUs without strings attached (as was in the case of WWF) The communities in the proposed conservation areas have shifted opinions at different times due dis- and/or mis-information from various stakeholders - The term " National Park" became a sensitive issue as it is now associated with central government (as opposed to the decentralized local government)

	Activity	Achievement	Output	Comments
4	(2nd yr) Develop the capacities of stakeholders in protected area management and bioregional planning through workshops and cross-visits			
4.1	Prepare training modules for ICDP's and bioregional planning	unclear	Training modules	Unclear information, with references made in year three toward end of project meeting for all field staff from Nunukan and Sorong to be held in Jakarta.
4.2	Provide training to stakeholders in ICDP design and implementation and bioregional planning	100%	Stakeholders trained	Partners such as BPN, Bappeda (Dinas Tata Ruang) went on GIS training course

YEAR II - NUNUKAN

	Activity	Achievement	Output	Comments
1	Establish liaisons and commitments with stakeholders based on WWF's concept of Regional Integrated Conservation and Development			
1.1	Produce hand-outs and brochures (presentation materials) explaining WWF's program and describing the pilot landscapes	50%	One color brochure, and one color hand-out per landscape produced and distributed	All materials are finished; only one step needs to be taken i.e. going to the printer to be printed. Delays were caused due to being treated as a low priority activity.
1.2	Meet/consult stakeholders to gain support for the pilot landscapes and WWF's proposed approach			This extension activity is embedded and further described under activity 2.4.1.3
1.2.2	Visit sub-districts and villages in the second pilot landscape to introduce WWF and WWF's program and collect stakeholder data			
1.2.1	Visit provincial and district authorities in the second pilot landscape to introduce WWF and WWF's program and collect stakeholder data	100%	<ul style="list-style-type: none"> Preliminary agreements on the implementation of WWF's program and stakeholder participation eq. cooperation. Stakeholder profiles and positions presented in a draft document on stakeholder assessment. 	The data and information produced and compiled by WWF through its surveys and studies, was presented before an audience of District stakeholders, on invitation of the District's Ketua Bappeda (Head of the Regional Planning Office) in the first week of November 2000. Subsequent meetings in villages also took place

	Activity	Achievement	Output	Comments
1.3	Present study and survey results from the first pilot landscape (Nunukan) to Villages, District and Province (Draw up a protocol of participation and a work schedule together with stakeholders (1st, 2nd landscape))	100%	<ul style="list-style-type: none"> Increased participants involvement with the presented topics and issues Confidence building among stakeholders and between stakeholders and WWF-NRM, finding common ground. Direct feed-back of stakeholders, and a tentative joint program for further cooperation 	<ul style="list-style-type: none"> WWF gave input to draft regional development strategy for Kab. Nunukan The research department of the provincial Bappeda worked on the development of this strategy plan Village communities provided input toward spatial planning of their village area and the planning of the management of the village's natural resources.
1.4	Present study and survey results from the second pilot landscape to Villages, District and Province			This activity takes place in the third WWF-NRM Program year.
1.5	(Formalize stakeholder support with a MoU acceptable to the involved parties (1st, 2nd landscape))	100%	<ul style="list-style-type: none"> Increased participants involvement Common ground found among stakeholders Direct feed-back of stakeholders, and a tentative joint program for further cooperation 	The rationale for a MoU and a first draft has been discussed with the District (Bupati, Ketua Bappeda, Sekda, others) already since March 2000. Signing of MOU never took place, as the Local Government was not comfortable with signing of MOU with an NGO. However, efforts to do so were already optimal.
1.6	Draw up a protocol of participation and a work schedule together with stakeholders (1st, 2nd landscape)		A draft protocol of participation, program objectives and a joint work schedule between WWF-NRM and stakeholders.	This was postponed awaiting the formal decision to cancel the implementation of a second pilot landscape.
1.7	Hold a reconnaissance flight over the pilot landscapes with participants from the District (1st, 2nd pilot landscape)		Stakeholder awareness and feedback. Video and photo recordings. GPS readings of the flight route. Detection of recent developments.	Postponed until further agreement and funding
1.8	Formalize stakeholder support with a MoU acceptable to the involved parties (1st, 2nd landscape)		The MoU signed by the Nunukan District and WWF.	Postponed until further consultation and clarity – a big concern of the Bupati Kota on their financial and political responsibilities.

	Activity	Achievement	Output	Comments
2	Promote and support sustainable integration of conservation and development in regional development planning			
2.1	Develop a biodiversity conservation scenario with stakeholders (1st landscape) <i>Amended to:</i> <i>Work with District Government Planning Agencies to prepare the spatial plan and parts of the regional development plan)</i>			In preparation for this closer cooperation, and in accordance with the NRM's 2nd year workplan and budget developed and approved in November 2000, the project team was relocated from Balikpapan to Nunukan.
2.1.1	Perform biodiversity analysis using GIS applications	100%	Projections of biodiversity (biodiversity map) for the 1st landscape.	All are reported in Semi Annual Report July – November 2001
2.1.2	Assign conservation priorities and intensities within the pilot landscapes	100%	The conservation attributes of the various areas are recorded in the GIS database, printed as hard-copy maps, and documented in a brief technical report.	
2.1.3	Develop several alternative scenarios for biodiversity conservation (patterns of conservation priorities)	100%	The two alternative scenarios, available as thematic layers in the GIS, printed as hardcopy maps, and documented in a brief technical report with descriptions and data-sheets.	
2.1.4	Hold a stakeholder workshop at District level to demonstrate the GIS application and scenarios	100%	Documentation of the workshop's results.	The discussion among stakeholders concerning biodiversity conservation brought to a broader and more prominent level.
2.1.5	Hold a stakeholder workshop at Village level to demonstrate the GIS application and scenarios	100%	Same as above, focusing on village stakeholders	

	Activity	Achievement	Output	Comments
2.2	Develop land utilization scenarios (1st landscape) Amended to: <i>Develop land utilization scenarios with stakeholders</i>			
2.2.1	Outline land mapping units for land suitability analysis	100%	The land-mapping units, available as thematic layer in the GIS, documented and printed as hardcopy maps.	The RePPPProT data were processed to geographically match the map-basis used by the NRM program. The land systems were also used in the classification of vegetation types
2.2.2	Define land utilization types and determine biophysical and technical requirements	100%	The land utilization types defined and documented.	For Nunukan, the land use enterprises that are suitable with regard to the biophysical qualities of the area's land mapping units (land systems) was proposed in reports
2.2.3	Analyze the present institutional and legal requirements for the land utilization types	100%	The report on the LUTs expanded with the analysis on the institutional and legal frameworks.	An analysis of the legal and institutional aspects of the various proposed land uses and new relevant Government and District decrees and regulations (issued or in preparation) carried out
2.2.4	Determine yields, costs-benefits of land utilization types	100%	The report on the LUTs expanded with a financial and economic analysis.	
2.2.5	Determine impacts on biodiversity and environment of land utilization types	100%	The report on the LUTs expanded with the analysis on impacts on biodiversity and environment	
2.2.6	Construct several land utilization scenarios as input for stakeholder discussions (suitability, output, impact)	100%	The LUT scenarios, available as thematic layers in the GIS, printed as hardcopy maps, and documented in a brief technical report with descriptions and data-sheets.	Feasibility and market studies prepared to further assess the land use enterprises.

	Activity	Achievement	Output	Comments
2.2.7	Hold a stakeholder workshop at District level to demonstrate and discuss the scenarios	100%	Documentation of the workshop's results. The discussion among stakeholders concerning biodiversity conservation brought to a broader and more prominent level.	Land use opportunities and constraints, and the land suitability scenario, have been discussed mostly informally with District stakeholders. Land suitability maps have been distributed.
2.2.8	Hold a stakeholder workshop at Village level to demonstrate and discuss the scenarios	100%	Same as above, focusing on village stakeholders	Feedback was registered through questionnaires, sketch mapping, and discussions/interviews.
2.3	Develop What-If scenarios for regional development, integrating conservation and utilization			
2.3.1	Review existing development plans including the Propeda, RUTR, public and private sector plans (1st, 2nd landscape) Amended to: <i>Analysis and evaluation of biodiversity</i>	100%	Documented study	The biodiversity analysis and evaluation was kept simple and practical, since the biologist and GIS officer who were working in more detail on the issue both left in January 2001.
2.3.2	Identify framework of government development policies and targets Amended to: <i>Assign conservation priorities within the pilot landscape, in two alternative scenarios for conservation</i>	100%	Part of the documented study under 2.3.1	The four areas proposed for conservation (see 2.3.1.) have been overlaid with land suitability for agriculture, existing commercial land use concessions, and settlement areas.
2.3.3 Now 2.4.1	Analyze stakeholder needs, expectations and strategies (1st, 2nd landscape)	100%	A report on the stakeholder profiles.	

	Activity	Achievement	Output	Comments
Amended 2.4.1.1	<i>Identify and analyze overall government and sectoral development policies, targets, and activities</i>	100%	Reports on spatial plan and the Kabupaten's strategic plan (Propeda)	Plans, ideas, reports have been collected through informal meetings and discussions with District government staff.
Amended 2.4.1.3	<i>Work with villages to identify village resource management and land use priorities</i>	100%	Villagers have access to the data and information compiled by WWF	Villagers start to be interested to proceed with the planning process and give input for a follow-up program
2.3.4	Integrate conservation and utilization scenarios following stakeholders' needs, expectations, and strategies (1st land.)		The conservation and utilization scenarios are combined in 2-3 "what-if" scenarios, following the outcome of the workshops 2.1.4, 2.1.5, 2.2.7, 2.2.8.	Amended - already integrated to other parts of objective 2 (see above)
2.3.4.1	Assess the environmental costs and benefits of the combined utilization & conservation scenarios		Results of the assessment are presented as part of the documentation on the what-if scenario's, and are incorporated within the GIS database	
2.3.4.2	Assess the socio-economic costs and benefits of the combined utilization & conservation scenarios			
2.3.5	Present and discuss the What-If scenarios with the District and Provincial Government	100%	Record of the discussion.	
2.3.6	Present and discuss the What-If scenarios with the Village Governments	100%	Record of the discussion.	
2.3.7	Analyze changes needed in policies, institutional and legal arrangements to support the What-If scenarios	100%	Results of the analyses are presented as part of the documentation on the what-if scenarios. Record of the discussion.	

	Activity	Achievement	Output	Comments
2.3.8	Prepare and hold a stakeholder workshop to select a scenario as the basis for the Propeda and RTRWK	100%	Documentation of the workshop's results. A District's decision on the scenario selected as the blueprint for its Propeda and RTRWK.	
3	Select and document a second pilot landscape with high and unprotected biodiversity resources			NRM-WWF team undergoing restructuring, and all will be relocated to Nunukan
3.1	Select second pilot landscape			
3.1.1	Study of literature & data to assign priorities to under-represented ecosystem types and unprotected natural ecosystems		Compiled, analyzed and categorized data on the present status and condition of the areas recommended for protection by the Biodiversity Action Plan, presented in a summary report.	
3.1.2	Meetings / consultations with resource persons, who have knowledge on Kalimantan's remaining forests		The acquired information will be captured in travel and interview reports, photos, and video.	
3.1.3	Meetings / consultations with government officials and stakeholders in candidate landscapes		Travel and interview reports, photos, and video.	
3.1.4	Develop selection-criteria to decide on the second pilot landscape		Selection-criteria, indicators and weighing factors, systematized through a decision-matrix	
3.1.5	Apply selection-criteria to decide on the second pilot landscape		Second pilot landscape, based on a completed and applied decision-matrix.	
3.2	Acquire and process relevant primary and secondary data and integrate with the GIS planning database		Maps, relevant reports and documents compiled and cataloged.	
3.2.1	Acquire relevant available maps and secondary geographic data		GIS database including the themes covered.	
On hold, awaiting decision from management.				

	Activity	Achievement	Output	Comments
3.2.2	Digitize, and edit secondary data on topography, rivers, planimetric features, infrastructure		GIS database including the themes covered.	
3.2.5	Acquire secondary data on demography, socio-economy	100%	Data described, analyzed, and documented. Sub-sets of the data incorporated in the GIS database.	
3.2.6	Edit, incorporate secondary data on demography, socio-economy	100%	Relevant reports and documents compiled and cataloged.	
3.2.7	Acquire secondary data on biodiversity	100%		
3.2.8	Edit, incorporate secondary data on biodiversity	100%	Data described, analyzed, and documented. Sub-sets of the data incorporated in the GIS database.	
3.2.9	Acquire primary digital data on vegetation and land use from remote sensing sources	100%	Two or three Landsat7 scenes, with the raw data on CD-ROM	
3.2.10	Process primary digital data on vegetation and land use from remote sensing sources	100%	Processed and interpreted Landsat7 scenes, incorporated in the GIS	
3.2.11	Design field-survey for socio-economy, land use, and local customs data	100%	Survey design, implementation plan, TOR, and budget	
3.2.3	Digitize, and edit secondary data on soils, geomorphology	100%	GIS database including the themes covered.	
3.2.4	Digitize, and edit secondary data on land systems, land suitability	100%	Relevant reports and documents compiled and cataloged.	
3.2.12	Acquire, process primary data on socio-economy, land use, local customs, through field-survey	100%	Survey report. Primary data analyzed and structured.	

	Activity	Achievement	Output	Comments
3.2.14	Acquire, process primary data on biodiversity, through field-survey	100%	Survey report. Primary data analyzed and structured.	
3.2.15	Process biodiversity data with GIS	100%	<ul style="list-style-type: none"> • The updated GIS application for biodiversity analysis, along with the documentation of the program. • -Projections of biodiversity (biodiversity map) for the 2nd landscape. 	
3.2.16	Design vegetation and soil data field-surveys, including ground-truthing	100%	Survey design, implementation plan, TOR, and budget	
3.2.17	Acquire, analyze primary data on vegetation types and soils, through field-survey	100%	Survey report. Primary data analyzed and structured.	
3.2.18	Process primary data on vegetation types and soils with GIS	100%		
3.3	Document second pilot landscape	100%		
3.3.1	Print thematic maps and data-sheets	100%	Thematic maps and data-sheets printed and distributed to relevant stakeholders.	
3.3.2	Produce document with quantitative and qualitative description of second pilot landscape	100%	Document containing the information or links to the information compiled under activity 3.2.	
4	Develop alternative designs for protected area establishment, management, and control at the regional level.			

	Activity	Achievement	Output	Comments
4.1	Assess institutional, legal, and budgetary frameworks and regulations for possible regional authority on establishment and management of protected areas	100%	Report with the results of the analysis and recommendations.	
4.2	Recommend changes to the various frameworks to facilitate protected areas to be established and managed by regional authorities	100%	Accounts of discussions and meetings. Report on the recommended changes. Plan of approach to promote the changes.	
4.3	Review and develop management models for community participation in conservation and sustainable forest utilization			Year 3 WWF-NRM program
4.4	Review and develop innovative funding mechanisms for protected area management	100%	Study report.	
4.5	Develop specific stakeholder agreements (e.g. private-sector & park partnerships) for protected area management			Year 3 WWF-NRM program.
5	Develop the capacities of stakeholders in protected area management and bioregional planning through training workshops and cross-visits			
5.1	Document lessons learned with the development and implementation of the integrated regional conservation and development concept	100%	Experiences with the development and implementation of the approach in District Nunukan documented.	

	Activity	Achievement	Output	Comments
5.2	Prepare training modules for development scenario building, and biodiversity surveying		Training needs assessment and training modules	This is rather unclear on what training modules has been prepared by WWF to incorporate lessons learned in a more systematic way. All relevant materials are available in documents and reports forms
5.3	Provide training on development scenario building, and biodiversity surveying			Year 3 WWF-NRM program.

YEAR III – NUNUKAN

	Activity	Achievement	Output	Comments
Target 1:	District Spatial Plan of Nunukan District is completed by October 2002.			Changes in the report writing were applied in this third year, where WWF focused as evidence of efforts outlined in each activity initially proposed in the annual workplan
Milestone 1:	Spatial Planning Team established	100%	Planning Team of Spatial Plan is established by Nov 2001.	
1.1.	Conduct consultation and discussion with Bappeda to establish Planning Team of Spatial Plan.			
Milestone 2:	Term of Reference (TOR) of Regional Spatial Plan developed by NRM Program is accepted by the Nunukan Government by December 2001			Final version of TOR was produced and submitted to the Head of Bappeda of Nunukan and was later on accepted by all parties involving in the team on February 28, 2002.
1.2.	Develop Term of Reference of Spatial Plan of Nunukan District. Amended to: Develop ToR with more concern on the integration of biodiversity conservation and regional development as guideline that can be used in designing the Regional Spatial Plan of Nunukan (Rencana Tata Ruang Wilayah Kabupaten Nunukan/RTRWK)	100%	Draft ToR or/and Framework of Regional Spatial Plan (RT/RWK) of Nunukan District to be presented to the Govt of Nunukan District	This was made possible by appointment of WWF as a member of the Tim Teknis Tata Ruang (Spatial Planning Technical Team) Kab. Nunukan. Input is largely concerning functions of forests (protection, cultivation) and less input on biodiversity conservation in particular
1.3.	Organize consultation and discussion meeting among members of Planning Team of Spatial Plan of Nunukan District.	100%	Framework, guideline and concept of spatial plan	As part of the Spatial Plan Techninal Team, this is a regular activity for WWF. Report on their progress is also available

	Activity	Achievement	Output	Comments
1.4.	Conduct consultation and discussion with government, DPRD, community, and other institution and social organization concerning TOR and Planning Process in developing Spatial Plan.	100%	The ToR and planning process of Spatial Plan are accepted by all parties involves	Draft Kab. Nunukan's spatial plan has been developed by a consulting firm contracted by Bappeda, and presented in all relevant agencies/bodies. Process of approval was delayed, as the local parliament did not rank it as a high priority in their agenda.
Milestone 3:	Survey, data collection and data analysis of Spatial Plan are completed by June 2002	100%	Details are given in each activity	
1.5.	Carry out lobbying, consultation, and discussion with Bappeda of East Kalimantan province in relation to land use status of Sebuku-Sembakung. Looking possibility for changing from non-forest (KBNK) to forest utilizations (KBK).	100%	Expected result changes the land use of Sebuku-Sembakung from non-forest to forest utilization area	The output expressed here is requires clarification in terms of tangible and measurable results. However, all activities outlined have been carried out and documented by the WWF team.
1.6.	Improve and update data and information required including GIS Maps.	100%	Data base of Nunukan District is completed and of GIS maps are available, both in hard copy and CD ROM	NRM-WWF has become well known by the local govt bodies/agencies and other stakeholders (NGOs, heads of villages, community leaders, etc) as the place to get GIS processed maps of Nunukan
1.7.	Develop scenario of several alternatives for setting a new biodiversity conservation or protected area in Sebuku-Sembakung Watershed	100%	Proposal of biodiversity conservation or protected areas in Sebuku-Sembakung	4 scenarios were developed and presented to Bappeda/Dinas Tata Ruang for distribution and discussion

	Activity	Achievement	Output	Comments
1.8.	Work together with spatial planning consultant in designing concept of spatial plan by integrating development planning of biodiversity conservation into regional spatial planning of Nunukan District	100%	First draft of regional spatial plan of Nunukan District	This was completed and ready for approval by the local government (DPRD)
1.9.	Conduct collaboration seminar with Bappeda and Spatial Planning consultant	100%	Input (ideas, suggestions, criticisms, etc) from the participants of the seminar that can used to improve the spatial plan	The seminar was implemented with the local govt budget (utilizing budget set aside for their spatial planning consultants), with input on participants and speakers from WWF (e.g. masyarakat adat, NGOs, DPRD, Bappeda, KaDinas)
1.10.	Work together with spatial planning consultant to revise draft spatial plan	100%	Second draft of spatial plan	This was made after input from the seminar (outlined above), in addition to further meetings with the consultants in Jakarta. Adjustment size of protected areas have been put into the draft spatial plan (from approx 600,000 ha to 220,000 ha) to better accommodate the district development needs
Target 2:	Proposal of Biodiversity Conservation Areas on Sebuku-Sembakung is accepted by the Government of Nunukan District and agreed to be discussed at the local parliament level (DPRD Nunukan) by October 2002.			
Milestone 1:	<i>Proposal of biodiversity conservation areas in Sebuku-Sembakung integrated into spatial plan of Nunukan district is agreed by government of Nunukan district by August 2002</i>			<i>The target date had been moved forward based on the previous year's progress and current year's WWF strength in GIS expertise</i>

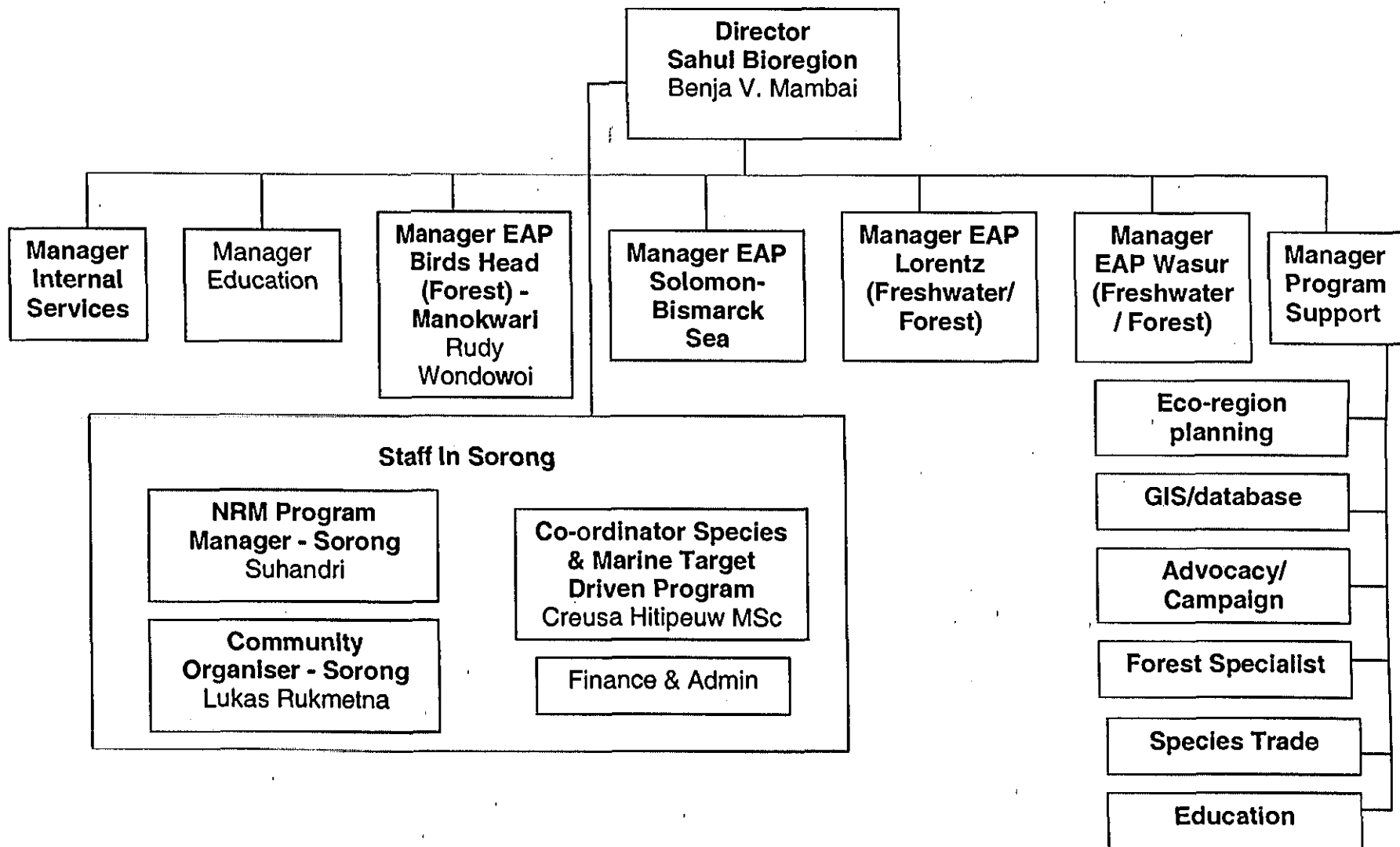
	Activity	Achievement	Output	Comments
2.1.	Produce campaign materials and publications explaining the importance of establishment of Sebuku-Sembakung as protected areas or biodiversity conservation areas for ensuring sustainable development in Nunukan District	80%	Handouts, leaflets, and brochures about protected area and sustainable development in Nunukan district.	All but printing of the brochures (which needs only be taken to a printer) is completed.
2.2.	Organize seminar/workshop of natural resources management and conservation	100%	Relevant stakeholders understand and are aware the importance of Sebuku-Sembakung as biodiversity conservation areas	Workshop was implemented, but indicator of 'understanding and awareness of the local community on the issue discussed' was not evaluated
2.3.	Organize natural resource conservation campaign (TV, local radio station, local newspaper, etc)	100%	Increased awareness and commitment from relevant stakeholders about sustainable natural resources management	Although this has been completed, no evaluation was carried out to determine or 'quantify' results to better understand the trend
2.4.	Develop cooperation with other NGOs in promoting and campaigning natural conservation	100%	Network collaboration with other NGOs established in Nunukan district	As initially there were no local NGOs that are consistently active in implementing their programs, the network, significant efforts were carried out to collaborate with larger NGOs in Balikpapan/ Samarinda (CORI, CARE) and a number of known small local NGOs (Autonomy Center, Lingham, etc.) This kind of collaboration is essential to promote and campaign sustainable natural resource management within the framework of spatial planning development.
Milestone 1:	Resource and economic valuation is completed by March 2002	100%	Survey reports	
3.1.	Conduct resource and economic valuation of Sebuku-Sembakung watershed	100%	Report on resource and economic valuation study of Sebuku-Sembakung, to be used to develop alternative scenarios of Sebuku-Sembakung as proposed areas for biodiversity conservation	After overcoming technical barriers, survey was carried out in April-May, with final draft of the report still to be submitted by the consultants

	Activity	Achievement	Output	Comments
3.2.	Conduct survey of socio-economic and culture in three kecamatans (sub-districts), Lumbis, Sembakung, and Sebatik	100%	Data and information of socioeconomic and culture of pilot landscape is available.	Survey was carried out in conjunction with activity 3.1. Above. Final draft report still to be submitted
3.3.	Conduct reconnaissance elephant survey in three sub-watersheds of Sebuku watershed and its vicinity		Data and information of biodiversity, particularly elephant status and distribution, are available. Elephant habitat and distribution biodiversity can be identified.	Although actual sightings of the elephant were not successful, abundant evidence of their existence was documented
3.4.	Conduct elephant survey phase II in Sebuku watersheds and its vicinity	100%	Data and information of biodiversity, particularly elephant's status and distribution, are available. Also, elephant habitat and distribution biodiversity can be identified.	
Target 4:	Capacity and capability of NRM programs' partners (local government officials and local community) on natural resource management are improved by October 2002.			
Milestone 1:	Conduct a workshop on natural resource management in Nunukan by May 2002			
4.1.	Conduct workshop on natural resource planning, management, evaluation and monitoring		Knowledge, skills, capacity and capability of relevant government officials and stakeholders on natural resource planning, management, evaluation and monitoring increased	This was postponed due to new development on unexpected influx of Indonesian illegal migrant workers from Malaysia into Nunukan
4.2.	Conduct workshop on eco-region conservation			

	Activity	Achievement	Output	Comments
4.3.	Develop collaboration agenda through local community workshops	100%	Close collaboration between local community and WWF is established	<p>Village meetings to discuss issues on protected/conservation areas held regularly in Sebuk and Sembakung villages.</p> <p>Activities 4.3 - 4.9 are closely related, with both local government officials and community members met frequently in meetings/workshops.</p> <p>Government officials undertook GIS training</p>
4.4.	Conduct community workshop at village level on sustainable management and conservation (Sebuk)	100%	Alternative designs in managing natural resources and conservation are developed	
4.5.	Conduct training on mapping process and computing, such as designing Geographic Information System (GIS), using computer for reporting, planning and database development	100%	Knowledge of computing and mapping skills of relevant government officials and stakeholders are increased	
4.6.	Conduct conflict resolution workshop through local community participatory mapping		Close collaboration between local community and WWF is established	
4.7.	Empower local community in participatory mapping through education, training programs, comparative study and regular meeting	100%	Relevant local communities agree and map resource allocation of selected landscape	
4.8.	Strengthen local community organization on sustainable natural resources management	100%	Community organizations on environmental care and conservation are created	

4.9.	Conduct community workshop in village level on sustainable natural management and conservation (Sembakung)	100%	Alternative designs in managing natural resources and conservation are developed	
Milestone 3:	<i>Field studies to other protected areas/national parks are carried out by July 2002</i>			
4.10.	<ul style="list-style-type: none"> • Organize study tours or field visits to other protected areas or national park managed by community (social and/or community forest management) • Semiannual report is submitted to USAID by the end of May 2002 • Final report is submitted to USAID by the end of Nov 2002 • Project Evaluation is carried out in July 2002 • National presentation of project achievement is conducted in September 2002 • Financial audit of year 2 and year 3 is carried out starting from June 2002 	100%	Reports	

Annex V: Organogram of WWF Sahul Bioregion



Annex VI: Spatial data collected at provincial and regional scales in Papua

Provincial Level

- Forestry Land Use from Dept of Forestry 1:1,000,000
- Spatial Plan of Irian Jaya Province for 1992/2007
- Map of Irian Jaya's Forest, Freshwater and Marine resources from Forestry Dept. 1:250,000 legalised by Decree No89/Kpts/2/1999
- Biodiversity Action Plan for Irian Jaya
- Sixth Irian Jaya Five Year Regional Development Plan Book II & V
- Transmigration Implementation Plan in Irian Jaya from 1999/2000 to 2000/2001
- Road Network Map of Irian Jaya Province, Oct 1998
- List of General Mining and decrease of mining concessions in Irian Jaya

Birds Head region

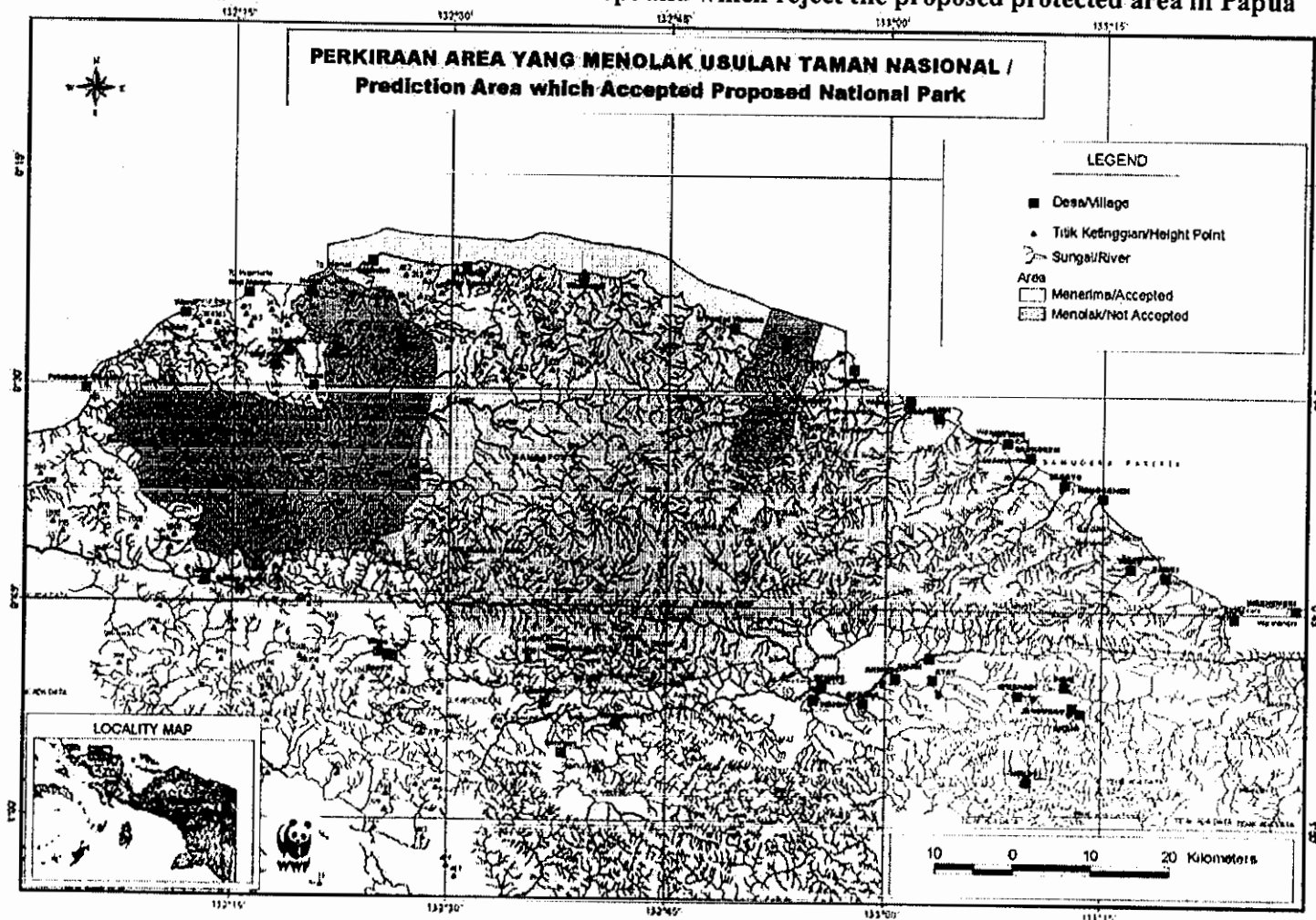
- Map of the District of Manokwari designating various land use;
- Research report published by the Center for Forest Study, University of Cendrawasih (Pusat Studi Kehutanan di Manokwari/PSKH) pertaining to the Jamursba Medi Tamrau national park Program.
- Maps of current forest utilization or designation;
- Annual report concerning the District of Manokwari's Agricultural Potency;
- Annual report concerning the District of Manokwari's Estate Potency;
- Annual report concerning the District of Manokwari's tourism industry development;
- Annual report concerning the District of Manokwari's road network and current condition;
- Present and Proposed Human ReSettlement/transmigration Program within the District of Manokwari;
- Report concerning the District of Manokwari's Mining Potency;
- The District of Manokwari's Fishing Industry Potency;
- Report concerning the District of Manokwari's current Industrial development and future expansion;
- The District of Manokwari's current water supply and future development;
- Annual statistic of the District of Manokwari District, of 1995, 1996, 1997, 1998, 1999
- Monograph of the District of Manokwari, 1994 – 1999
- Annual statistic of Ambarbaken SubDistrict, of 1997, 1998, 1999
- PDRB (District annual gross income) of 1993–1998 and 1999
- Report on development plan of Biak economic exclusive zone
- Report on the 25 years Basic Development Plan (POLDAS) and General Spatial Development Plan of the District of Manokwari, 1999
- Sorong District Spatial Plan 1991/2010

Existing digital files:

- ESRI data for population, roads, soil, geology, visigraph, elevation & precipitation
- CI data on pattern of endemics, priority habitats, birds, reptiles, amphibians, freshwater and marine plants
- Summer Institute of Linguistics map of ethnic groups based on language, language group and language family

- WWF data on rivers, contours, administrative boundaries, airports (5) and major towns (12 points)
- NOAA: Bathymetric Imagery, Topographic Imagery, Climate Anomaly
- WCMC: list of endemic, protected and endangered species
- AECC: locations of villages in Irian Jaya
- AirFlow Corp: precipitation, temperature, humidity, air pressure

Annex VII: Approximation of which areas accept and which reject the proposed protected area in Papua



Annex VIII: West Papua - Alternative scenarios of activities for 2 or 4 month no cost extension

What can be achieved during a no-cost extension period?

Ratification of the proposed protected area of Jamursba Medi – North Tamrau in the Sorong District Spatial Plan?

The government has recently decided that discussion of the draft plan and ratification of the final version should await the planned division of the district into more sub-districts. While WWF can continue to lobby for inclusion of the protected area in the spatial plan, the above process is likely to take more than 2 months especially given that the work of the local government in months of November and December is likely to be disrupted due to religious events (Ramadan, Idul Fitri, Christmas).

Increased community support for the conservation of Jamursba Medi – North Tamrau?

The initiation of economic development activities in both coastal and inland villages and the socialisation and survey activities to the villages has increased awareness and acceptance among local communities of the ICDP model. There are also increased expectations of, and opportunities for, developing alternative economic activities to reduce local people's dependence on unsustainable exploitation of forest resources. WWF staff in Sorong believe that, with continued support, by the end of December 85% of the communities within and adjacent to the proposed protected area would be supportive of a protected area model which took into account their traditional resource use rights, as long as this included alternative income generation opportunities.

In order to engender this level of support, WWF would need to:

- Complete participatory mapping & socio-economic/eco-tourism potential survey data
- Continue to build the capacity of local communities to develop alternative economic development activities and access to markets through training and facilitation
- Continue efforts to increase understanding among all stakeholders of the concept of community-based protected area management.
- Continue to build the institutional capacity of local NGOs and LMAs to adequately represent the local communities

The extent of achievement would depend on the extension period as follows:

Activity	Output	2 months	4 months
Target: <i>All data and information, including social and economic valuation and GIS maps required to develop the Conservation Area proposal of Jamursba Medi North Tamrau (JMNT) complete</i>			
Survey and participatory mapping	Complete data on <i>hak ulayat</i> distribution of communities	80%	100%
Survey of ecotourism potential	Complete data on ecotourism potential		100%

<p><i>Target:</i> <i>The proposal of JMNT as a conservation area integrated into the spatial plan of Sorong district, accepted by relevant stakeholders (provincial and district governments, local communities and relevant agencies) and agreed by the central government (the Ministry of Forestry)</i></p>			
<p>WWF can continue to lobby for inclusion of the area in the final version of the Spatial Plan . However, the government has recently decided that discussion of the draft plan and ratification of the final version should await the planned division of the district into more subdistricts. This is likely to take more than a few months.</p>			
Economic development activities with coastal & inland communities	Establishment of models of economic development that reduce pressure on forest resources	100%	
Intensive consultation with stakeholders	Consistent perception and agreement among stakeholders of community based PAM concept	75%	100%
<p><i>Target:</i> <i>Strengthened capacity of local NGOs, communities and other stakeholders</i></p>			
Lobbying of & crosslearning between NGOs and LMAs re: CB-PAM concept	Increased support from local NGOs and LMAs for the concept of CBPAM that takes into account the culture of local communities	80%	
Socialisation of the concept to local communities	Communities support concept of CB-PAM (that includes economic development initiatives)	75%	85% (of communities)

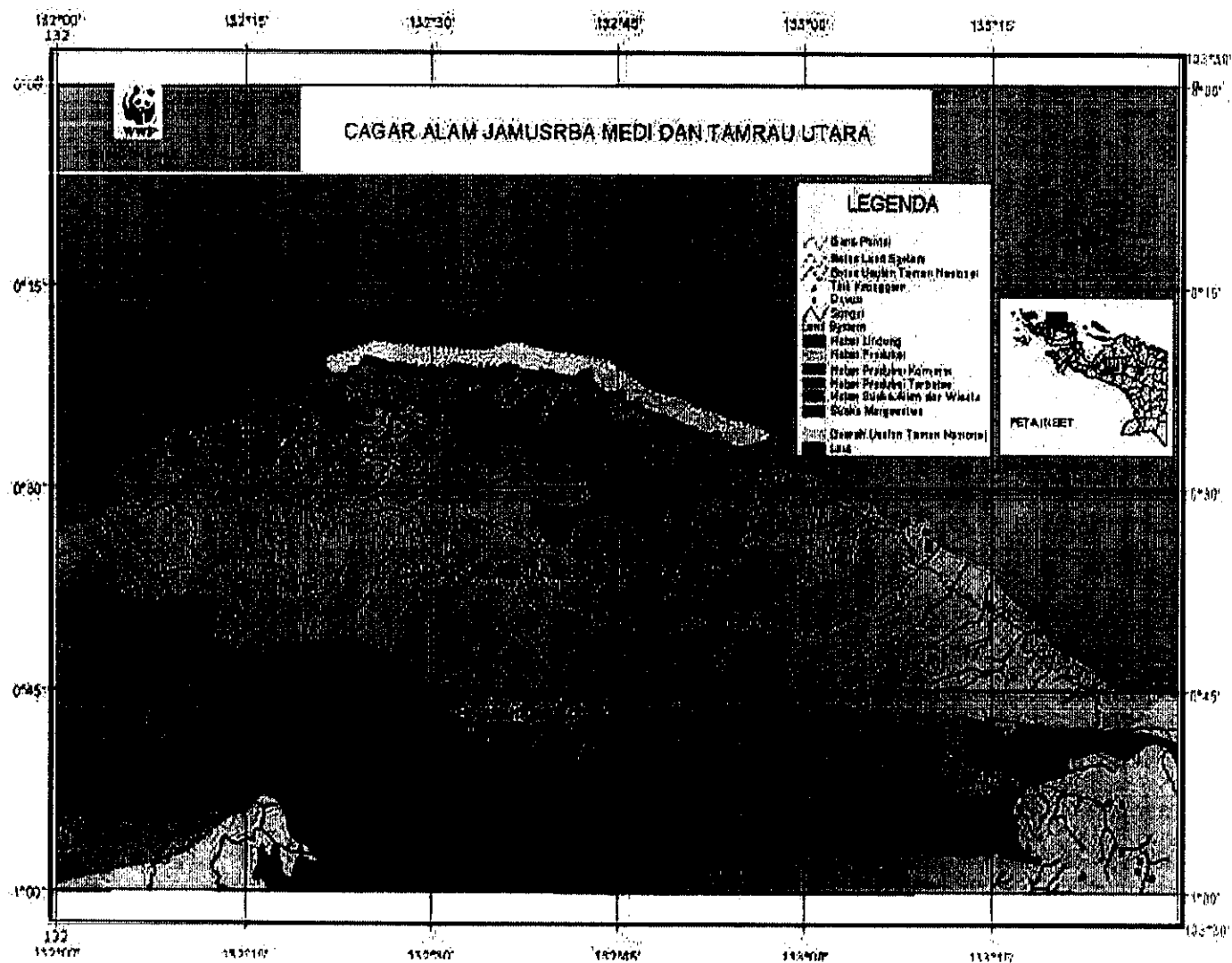
Annex IX: Specific Workplan for No-Cost-Extension for Nunukan, East Kalimantan

Based on the assumption that the Nunukan, East Kalimantan component of this project still has 55% of funds budgeted for 2001-2002 remaining, there should be funds sufficient to cover activities in the next 5 months. The actual funds remaining may need to be verified, but a range of a minimum of 3 months and a maximum of 6 months

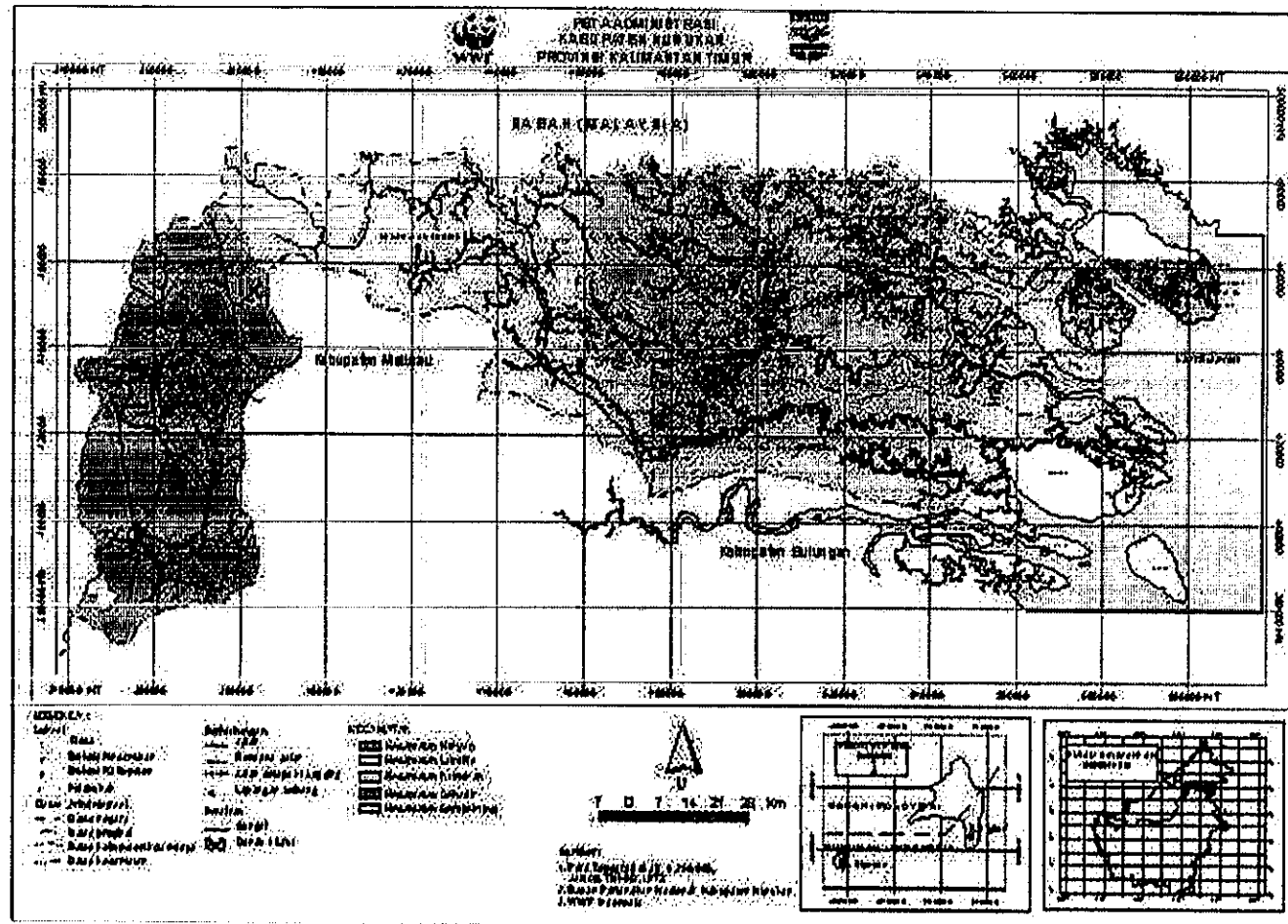
Since most of the outputs have been fulfilled by the Nunukan, East Kalimantan component of this project, the following are recommendations on completion and follow on activities that can be carried out by the team on site:

Objective/ Target	Activities	Output
Target 4 (item 4.6)	Conflict resolution workshop through local community participatory mapping	Report outlining <ul style="list-style-type: none"> • draft community agreements • toward resolution mechanism, • draft village boundaries, • draft list of potential conflicts
Targets 1 & 2 (items 1.11 and 2.2, respectively)	Intensive lobbying with Bupati and DPRD toward adopting a sustainable development based Kabupaten Spatial Plan which included the proposed conservation areas (PERDA, to be approved, or at the very least be on the agenda, before end of December 2002)	Report outlining <ul style="list-style-type: none"> • documented progress/digress • DPRD agenda (dates and issues discussed and decisions taken, re: spatial plan) <p>The main objective of this is maintaining the momentum of support from DPRD Chairperson</p>
Target 2 (item 2.1)	Producing campaign materials (updated version of materials already prepared but not printed), e.g. posters leaflets brochures. Content: Conservation issues, WWF.	Posters, brochures, leaflets
Target 2 (amended activities)	Analysis of alternative suitability of land-use for oil palm in relation to spatial planning development	Report outlining <ul style="list-style-type: none"> • documented progress/digress • technical explanation on environmental impact of monoculture, particularly oil palm <p>The main objective of this is ensuring WWF NRM support toward local stakeholders</p>

Annex X: Location Map for Papua site



Annex XI: Location Map for Kalimantan site



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